**2020 REASONABLY AVAILABLE CONTROL TECHNOLOGY DEMONSTRATION FOR THE** NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE IN SAN DIEGO COUNTY

**OCTOBER 2020** 





# 2020 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) DEMONSTRATION FOR THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR OZONE IN SAN DIEGO COUNTY

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The Federal Clean Air Act (CAA) requires ozone nonattainment areas (Moderate and above) to implement reasonably available control technology (RACT) for specific types of sources. San Diego County is subject to this requirement as a nonattainment area for the 2008 ozone and 2015 ozone standards. Accordingly, the San Diego County Air Pollution Control District (District) is required to adopt RACT level controls for sources subject to a U.S. Environmental Protection Agency (EPA) Control Techniques Guidelines (CTG) document and for any other major sources of ozone forming emissions. This 2020 Reasonably Available Control Technology (RACT) Demonstration for the National Ambient Air Quality Standards for Ozone in San Diego County demonstrates that all RACT requirements are satisfied in San Diego County.

Concurrent to this RACT Demonstration, the District proposes to adopt the 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County, which addresses separate CAA requirements as an ozone nonattainment area. Upon adoption by the Air Pollution Control Board, both documents will be submitted to the EPA through the California Air Resources Board (CARB) for approval as part of the San Diego County portion of the State Implementation Plan (SIP) for attaining and maintaining the 2008 and 2015 eighthour ozone standards.

Analysis of District rules concluded that some rules require submittal to (or redaction from) the San Diego County portion of the California SIP. Submittal of these additional rules will be completed through standard State and federal processes separate to the RACT Demonstration. These rules include:

Rule #	Rule Description	Action
61.3.1	Transfer of Gasoline into Stationary Underground Storage Tanks (Supplementing Rule 61.3)	Rule Being Submitted to EPA by August 2020
69.2.1	Small Boilers, Process Heaters, and Steam Generators ( <i>Amended July 8, 2020, and proposed</i> <i>for submittal to EPA</i> )	Rule Being Submitted to EPA by August 2020
69.2.2	Medium Boilers, Process Heaters, and Steam Generators (Adopted July 8, 2020, and proposed for submittal to EPA)	Rule Being Submitted to EPA by August 2020
69.4.1	Stationary Reciprocating Internal Combustion Engines ( <i>Replacing Rule 69.4</i> )	Rule Being Submitted to EPA by August 2020
69.3.1	Stationary Gas Turbine Engines (Proposed for amendments and submittal to EPA)	Rule Proposed for Amendment/Submittal to EPA by March 2021*
TBD	Major Source Landfill Flare Control Measure (Proposed for adoption and submittal to EPA)	Rule Proposed for Adoption/Submittal to EPA by March 2021*
61.2	Transfer of Volatile Organic Compounds into Mobile Transport Tanks ( <i>Proposed for amendment</i> <i>and submittal to EPA</i> )	Rules Proposed for Amendment/Submittal to EPA in 2021*
67.6.1	Cold Solvent Cleaning and Stripping Operations (Proposed for amendment and submittal to EPA)	Rules Proposed for Amendment/Submittal to EPA in 2021*
69.4	Stationary Reciprocating Internal Combustion – Reasonably Available Control Technology (Superseded by Rule 69.4.1 - to be redacted upon EPA SIP approval of Rule 69.4.1)	Former Rule Being Redacted from SIP

\* Not required for attainment and do not have controls or reductions relied upon for meeting Reasonable Further Progress (RFP) or demonstrating timely attainment of the 2008 or 2015 ozone standards



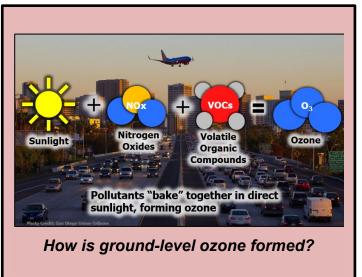


# 1.0 INTRODUCTION, OVERVIEW, AND REQUIREMENTS

# **SECTION 1.0 HIGHLIGHTS**

- The District is required to prepare a RACT Demonstration for the 2008 and 2015 national ozone standards. This Demonstration meets the requirements for both standards.
- RACT is "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility."
- To comply with federal law, RACT must be implemented for all VOC/NOx sources subject to a Control Techniques Guidelines (CTG) document and for all other "major sources." However, cost-effectiveness can be factored into NOx RACT level of control.
- This RACT Demonstration was conservatively based upon a Severe ozone nonattainment classification. This classification defines a major source as a stationary source that emits, or has the potential to emit, at least 25 tons per year of VOC or NOx. All facilities with actual emissions within 50% (12.5 tons per year) of the 25 ton threshold for VOC or NOx were included for review.
- The District conducted a thorough review of other California air district rules to evaluate RACT, as well as applicable State/federal guidance.

Ground-level ozone is a common air pollutant that poses a threat to public health and the environment. It is formed by the reaction of volatile organic compounds (VOC) and oxides of nitrogen (NOx) in the presence of sunlight and States are required to adopt heat. regulations to control VOC and NOx emissions pursuant to Section (§) 110(a) of the Clean Air Act (CAA). Moreover, Moderate and above ozone nonattainment areas are required to adopt rules implementing "reasonably available control technology" (RACT) pursuant to CAA §172(c)(1) and 182.



San Diego County falls under RACT requirements as a Moderate or above nonattainment area for both the 2008<sup>1</sup> and 2015<sup>2</sup> national ozone standards. The region has fulfilled the requirements as fully demonstrated herein.

# 1.1 RACT REQUIREMENTS

# 1.1.1 RACT Defined

RACT is defined by the EPA as "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility."<sup>3</sup> A RACT analysis should, therefore, take into account the technological and, in the case of NOx, economic impacts of controls.

For example, if a certain type of NOx emission control or emission limitation is determined to be too costly compared to the amount of emission reduction it achieves, that NOx control might not be considered RACT. Also, as economic factors may vary by region, a control technology or emission limitation designated as meeting RACT in one location does not necessarily define RACT for another location.

<sup>&</sup>lt;sup>1</sup> 81 FR 26697

<sup>&</sup>lt;sup>2</sup> 83 FR 25776

<sup>&</sup>lt;sup>3</sup> 44 FR 53762

## 1.1.2 VOC RACT

RACT level controls must be implemented for all VOC sources that are subject to a Control Techniques Guidelines (CTG) document and for all other "major sources"<sup>4</sup> of VOC emissions pursuant to CAA §182(b)(2). A CTG is a guideline document issued by the EPA that establishes a "presumptive norm" for the level of emission control that represents RACT for a specific VOC source category.

#### 1.1.3 NOx RACT

The RACT requirements are extended to major sources of NOx pursuant to CAA §182(f). The EPA did not issue CTGs for NOx sources but instead provided general guidance, Alternative Control Techniques (ACT) documents, indicating the levels of NOx control that represent RACT. Further, the preamble to EPA's 2005 eight-hour ozone implementation rule summarizes NOx RACT guidance as follows: "States should consider in their RACT determinations technologies that achieve 30 - 50% reduction within a cost range of \$160 - \$1,300 per ton of NOx removed."<sup>5</sup> This range was originally considered for RACT in 1994. Adjusting for Consumer Price Index (CPI) inflation in May 2020 (the latest available data), this would result in a cost-effectiveness threshold range of \$281 - \$2,280 per ton of NOx removed. However, the District has used a more conservative cost-effectiveness threshold of \$5,000, which is more than double EPA's inflation adjusted threshold.<sup>6</sup>

In addition to the EPA cost-effectiveness guidance, the District also considered a local costeffectiveness threshold it uses when adopting measures to control NOx emissions. Provided the measures are technologically feasible, controls have been adopted at costs of up to \$12,000 per ton of NOx reduced (i.e. \$6 per pound). Use of this threshold provides for an even more definitive determination of compliance with RACT requirements.

#### 1.1.4 RACT Source Size Thresholds

Per CAA §182, the emissions threshold that determines which stationary sources are considered major stationary sources depends upon the classification of the ozone nonattainment area. The District conservatively conducted a RACT analysis based on a

<sup>&</sup>lt;sup>4</sup> A major source, for the purposes of this Demonstration, is defined as a stationary source that emits, or has the potential to emit, at least 25 tons per year of VOC or NOx.

<sup>&</sup>lt;sup>5</sup> 70 FR 71654

<sup>&</sup>lt;sup>6</sup> Cost-effectiveness (\$/ton) is the ratio of annualized cost (\$/year) to annual emission reduction (tons/year). The annualized cost is calculated from the installed cost of control, annual operating and maintenance costs, and indirect costs such as insurance or overhead. Sources of cost information include other air districts, and product or equipment manufacturers and/or distributors. The emission reduction is the difference between baseline emissions and further control emissions. Emission reductions are calculated using rule emission limits, standard emission factors or source test data, and actual annual usage.

Severe ozone nonattainment classification. This classification defines a major source as a stationary source that emits, or has the potential to emit, at least 25 tons per year of VOC or NOx. To conduct a thorough analysis, all facilities with actual emissions within 50% (12.5 tons per year) of the 25-ton threshold for VOC or NOx were included for review.

Additionally, each CTG specifies a threshold size of sources that are subject to the CTG. For example, some of the early CTGs applied to sources emitting 25 tons or more of VOC per year, while some of the newer CTGs apply to sources emitting 15 pounds or more of VOC per day. Sources that meet the applicable size threshold specified in the CTG, and any major stationary sources with a potential to emit at least 25 tons per year of VOC or NOx not already covered by a CTG, are subject to RACT.

# 1.2 RACT ANALYSIS APPROACH

## 1.2.1 Considering the Latest Information

RACT can evolve over time as new technology becomes available or the cost of existing technology decreases. The RACT rules currently in the SIP were previously submitted to fulfill RACT requirements for the former 1979 one-hour ozone standard (0.12 parts per million).<sup>7</sup> However, EPA guidance states that rules previously approved as RACT for the former one-hour ozone standard may not automatically be assumed to still represent RACT for the eight-hour ozone standards. Similarly, the EPA has indicated that a comparison of District rules solely against CTGs that are many years old, such as those issued before 2010, is not sufficient for a RACT demonstration. Rather, the RACT analyses must reflect the "latest information."<sup>8</sup> It must be reevaluated in light of more recent developments in control technology. This includes a comparison of District rules against corresponding rules of other California air districts, as well as ensuring District rules establish minimum control requirements as found in these older CTGs.

Accordingly, for source categories not covered by newer CTGs, District rule requirements were compared to the latest versions of comparable rules of other California air districts, including the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District (SJVAPCD), as well as reviewing all applicable CTGs. Both air districts are widely recognized as having the most stringent air quality rules in the nation to address substantial air quality concerns in those regions. The SCAQMD and SJVAPCD have adopted rules that are technology-forcing, i.e., that are designed to compel the development of new technologies to help meet their emission reduction goals. Control requirements in those regions often go well beyond RACT, representing best available control technology (BACT) or lowest achievable emission rate (LAER). Nevertheless, over time and as the new technology becomes commercially available and more cost-effective, eventually it could represent RACT for other nonattainment regions.

<sup>&</sup>lt;sup>7</sup> 44 FR 8202

<sup>&</sup>lt;sup>8</sup> 70 FR 71655

## 1.2.2 EPA Guidance

The EPA issued guidance for preparing RACT SIPs on May 18, 2006.<sup>9</sup> Additionally, EPA Region IX issued a basic framework for RACT SIPs through correspondence with CARB on March 9, 2006. The correspondence dictates the following requirements for an approvable RACT SIP:

- "Describe efforts to identify all source categories within the District requiring RACT, including CTG sources (i.e., covered by an EPA Control Techniques Guidelines document) and major non-CTG sources." (Section 2.0, Attachments A, B, C, D, and E)
- "Submit Negative Declarations where there are no facilities (major or minor) within the District subject to a CTG." (Section 1.2.2.2 and Attachment B)
- "For all categories needing RACT, list the State/local regulation that implements RACT. It may also be helpful to list the date EPA approved these regulations as fulfilling RACT." (Section 2.0, Attachments A and E)
- "Describe the basis for concluding that the regulations fulfill RACT. Documents useful in establishing RACT include CTG's, Alternative Control Techniques (ACT) guidance, Maximum Achievable Control Technology (MACT) standard, New Source Performance Standards (NSPS), California Suggested Control Measures (SCM) and RACT/Best Available Retrofit Control Technology (BARCT) determinations, and guidance and rules developed by other State and local agencies [...]" (Section 2.0, Attachments A and E)

#### 1.2.2.1 CTGs for Sources in San Diego County

Attachment A lists all CTGs for which there are applicable sources in San Diego County and the corresponding rule or rules adopted by the District. In all cases, the District has adopted at least one rule covering the applicable CTG. EPA has approved many of the corresponding District rules as part of the SIP. In cases where the source category CTG was older, the District reevaluated rules and compared them to requirements found in other California air districts (see Section 1.2.1).

#### 1.2.2.2 CTGs with No Subject Sources in San Diego County ("Negative Declaration")

Attachment B identifies all CTGs for which there are no applicable sources in San Diego County. Accordingly, the District has either no corresponding rules relating to these CTGs or may no longer be applicable to RACT because all source operations are under a CTG applicability threshold or are no longer considered a major source. For any CTGs for which the District has no corresponding RACT rule, the EPA requires that the RACT SIP submittal include a certification (also called a "Negative Declaration") that there are not, and are not

<sup>&</sup>lt;sup>9</sup> Harnett, William T. RACT Qs & As – Reasonably Available Control Technology (RACT): Questions and Answers. U.S. Environmental Protection Agency, 18 May 2006. Web. 13 Nov. 2015. <u>https://www3.epa.gov/ttn/caaa/t1/memoranda/ractqanda.pdf</u>.

expected to be, any sources in the nonattainment area that would be subject to those CTGs.<sup>10</sup> Attachment B lists the CTGs for which the District is certifying a Negative Declaration. Searches were performed within the District's permits and emission inventory databases, as well as the internet and yellow pages, to confirm there were no source types in San Diego County that would be subject to the CTGs. District staff also consulted with knowledgeable District inspectors and permit engineers to confirm there were no sources in any CTG category for which a Negative Declaration was claimed.

## 1.2.2.3 RACT for Major Stationary Sources

The District has adopted several rules to meet RACT requirements for major VOC and NOx sources within San Diego County that are not covered by a CTG. Attachment C specifies these local rules and their status with respect to submittal to EPA and approval as part of the SIP. Attachment D further specifies the major (and potentially major) VOC or NOx stationary sources found in San Diego County, and the prohibitory rules that apply to those facilities.

## 1.2.3 ACT Applicability

In some circumstances, air districts must also assess EPA's ACTs in determining RACT requirements.<sup>11</sup> ACTs are used primarily as a reference point for available control technology. However, the determination of cost-effectiveness is left to local air districts. This differs from a CTG, which requires local air districts to control emissions for an affected source category based on EPA's determination that the controls identified are technologically and economically feasible.

For the purposes of this RACT Demonstration, the District reviewed ACTs as one of the many methods for evaluating available control technologies for additional emission reductions (similar to MACT and NSPS documentation). Like CTGs, older ACTs were reviewed alongside more stringent rules adopted elsewhere in California to ensure District rules fulfill RACT requirements.

# 1.2.4 Feasibility Criteria

When new CTGs or other air district rules were found to contain provisions that were more stringent than the District's current rule, the District evaluated the more stringent provisions to

<sup>&</sup>lt;sup>10</sup> Harnett, William T. RACT Qs & As – Reasonably Available Control Technology (RACT): Questions and Answers. U.S. Environmental Protection Agency, 18 May 2006. Web. 13 Nov. 2015. <u>https://www3.epa.gov/ttn/caaa/t1/memoranda/ractganda.pdf</u>.

<sup>&</sup>lt;sup>11</sup> EPA guidance for preparing RACT SIPs confirms that a RACT analysis is needed for source categories for which an ACT document has been published. However, due to technological advancements, an ACT may not represent current levels of control compared to CTGs or other air district rules. Therefore, while ACTs provide a good starting point for analysis in some cases, the requirement to meet the minimum level of control recommended within them does not necessarily apply. Source categories for which there is an applicable ACT but no local major sources are not required to meet RACT requirements.

determine if they were feasible for implementation in San Diego County. The more stringent provisions were determined to be feasible if both of the following conditions were met:

- 1) The provisions would provide VOC or NOx emission reductions if implemented on applicable RACT sources<sup>12</sup> in San Diego County; and
- 2) The provisions would be technologically and economically feasible for implementation on sources in San Diego County.

For the more stringent provisions that were determined feasible, the District amended (or will amend) its rules accordingly to represent current RACT. These updated RACT rules are consequently being submitted for approval as part of the SIP concurrent with this RACT SIP submittal, and can be found as referenced within Section 2.0, Attachment A, and Attachment E.

The majority of District rules already in the SIP were reevaluated and reaffirmed to represent RACT. Accordingly, these rules require no amendments or additional action at this time. RACT findings were reaffirmed when either:

- 1) District rule requirements were at least as stringent as the relevant newer CTG or other air districts' rules; or
- 2) The District demonstrated that the more stringent requirements of a newer CTG or other air district rules were not feasible for implementation in San Diego County, because either:
  - a) The provisions would <u>not</u> provide VOC or NOx emission reductions if applied to the sources in San Diego County; or
  - b) The provisions would <u>not</u> be technologically or economically feasible for sources in San Diego County.

District rules that are subject to a CTG, or apply to a major source, but had not previously been submitted into the SIP, have also been evaluated for current RACT by comparing them to applicable new CTGs or other California air district rules. These rules, as specified throughout this Demonstration, are also being submitted into the SIP as applicable.

<sup>&</sup>lt;sup>12</sup> Subject to CAA §182(b) and (f).



# 2.0 RACT ANALYSIS RESULTS

#### **SECTION 2.0 HIGHLIGHTS**

- All District VOC and NOx RACT rules meet (or will meet) required levels of control to comply with the Clean Air Act. In other words, they remain on-par with or, in some cases, are more stringent than other California air districts.
- Three District rules required adoption/amendment no later than August 3, 2020, to satisfy federal RACT requirements (Rules 69.2.1, 69.2.2, and 69.4.1). The rules were adopted/amended on July 8, 2020.
- Two District rules must be adopted/amended no later than March 23, 2021, to satisfy federal RACT requirements (Rules 69.3/69.3.1 and a Major Source Landfill Flare Control Measure – Rule Number TBD). The proposed rules will be considered for adoption or amended no later than March 23, 2021.
- Two District rules require amendment as soon as practicable in 2021 to satisfy federal RACT requirements (Rule 61.2 and 67.6.1).
- Several rules have been amended or adopted recently. These will (or have already been) submitted to the EPA through CARB for inclusion into the State Implementation Plan (SIP) to be federally enforceable, to comply with federal law.
- The District has made a Negative Declaration for rules/categories in which no applicable sources exist in San Diego County for certain RACT emission categories. These are found in Attachment B.

The following section describes all District rules regulating VOC and NOx sources, summarizes the RACT analysis findings, and explains the SIP submittal/approval status for each rule. For completeness, Attachment E identifies all District rules that regulate VOC and NOx sources, including both RACT rules and non-RACT rules.

Several of the rules discussed below are not subject to RACT requirements and thus were not evaluated. As explained below, these rules either do not require emission control at a specific source category, or they apply to source categories that are neither covered by a CTG nor located at a major source. Discussion of these rules has been included for informational purposes to clarify why they do not apply to RACT.

## 2.1 VOC RULES

#### 2.1.1 Rules 59 and 59.1

District Rule 59 (Control of Waste Disposal Site Emissions, November 3, 1987) regulates VOC emissions from waste disposal sites other than the municipal solid waste landfills that are subject to Rule 59.1. District Rule 59.1 (Municipal Solid Waste Landfills, June 17, 1998) regulates VOC emissions from municipal solid waste landfills. Rule 59.1 was adopted to incorporate by reference the control requirements of 40 CFR 60.750-759 (i.e., Subpart WWW) outlined in 40 CFR 60.30c-36c (i.e., Subpart Cc "Emission Guidelines"). EPA has not issued a CTG for the source category, and neither rule has been submitted into the SIP.



In San Diego County, four large landfills (Facilities A, B, C, D) report VOC emissions above the RACT applicability threshold (12.5 tons of VOC per year) in CARB's emission inventory. Each facility maintains an active Title V permit, which allows EPA and citizens to enforce or challenge the terms of issued permits. However, the District has determined that VOC emissions from each of these facilities are 95-100% fugitive.<sup>13</sup> Fugitive emissions are not counted for the purposes of determining a federal major stationary source.<sup>14</sup> Since 2004, residual "non-fugitive" VOC emissions from these facilities have been well below the RACT threshold of applicability, demonstrating a pattern of operational consistency. As such, these facilities are not considered major sources for RACT purposes.

Since no CTG is applicable for the source category, and because there are no major sources in the region, the District has determined that Rules 59 and 59.1 are not subject to RACT requirements of the CAA, and therefore are not being submitted with this RACT SIP submittal. The District further determines that because almost all emissions from this source category are fugitive, further rulemaking would not yield significant emission reductions, even if facilities expand in the future. However, because there are major sources of NOx emissions from flares operating at some of these facilities, the District must evaluate RACT for this source (flares) as well. This analysis can be found in Section 2.2.11 of this RACT SIP submittal.

## 2.1.2 Rule 61.0

District Rule 61.0 (Definitions Pertaining to the Storage and Handling of Organic Compounds, October 16, 1990) does not in itself regulate sources of emissions. Instead, it simply contains definitions pertaining to Rules 61.1 through 61.8. Rule 61.0 was approved into the SIP on September 13, 1993.<sup>15</sup>

#### 2.1.3 Rule 61.1

District Rule 61.1 (Receiving and Storing Volatile Organic Compounds at Bulk Plants and Bulk Terminals, January 10, 1995) regulates VOC emissions from large storage tanks for gasoline and other high volatility motor vehicle fuels. Rule 61.1 has standards for fittings in internal floating roof tanks, external floating roof tanks, and fixed roof tanks, and requires Best

<sup>&</sup>lt;sup>13</sup> SDAPCD Rule 20.1 defines "fugitive emissions" as the "quantifiable emissions which could not reasonably pass through a stack, chimney, flue, vent, or other functionally equivalent opening." In effect, these emissions cannot be controlled.

<sup>&</sup>lt;sup>14</sup> Pursuant to 40 CFR 51.165(a)(1)(iv)(C) and 40 CFR 70.2, New Source Review (NSR) and Title V permitting programs do not include fugitive landfill emissions for the purposes of determining a federal major stationary source.

<sup>&</sup>lt;sup>15</sup> 58 FR 47831

Available Control Technology (BACT) for new or replacement rim seals in external and internal floating roof tanks.<sup>16</sup> The EPA approved Rule 61.1 into the SIP on August 8, 1995.<sup>17</sup>

The applicable CTGs<sup>18</sup> date from the 1970s. RACT was therefore evaluated by comparing Rule 61.1 to two related SCAQMD rules: Rule 463 (Organic Liquid Storage, November 4, 2011) and Rule 1178 (Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, April 7, 2006), as well as the older CTGs.<sup>19</sup> As the title "Further Reductions" implies, Rule 1178 represents a level of control beyond RACT. It applies to aboveground storage tanks at petroleum facilities emitting more than 20 tons per year of VOC. The rule specifies rim seal types and fittings for external and internal floating roof tanks and fixed roof tanks, and requires all external floating roof tanks subject to the rule be domed.

The control requirements of District Rule 61.1 are comparable to SCAQMD Rule 463; thus, it still represents RACT. Review of relevant rules of other California air districts indicates that SCAQMD is the only air district with requirements for installing domes in all external roof tanks; thus, this requirement cannot be considered widely implemented by other air districts at this time. Adopting the more stringent standards of Rule 1178 would not be technologically and economically feasible and not represent RACT. For these reasons, the District determines that Rule 61.1, as approved into the SIP on August 8, 1995, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

In consideration of potential future rulemaking, SCAQMD Rule 1178 includes more stringent requirements for roof fittings and the doming of external floating roof tanks and requires inspections to document fugitive vapor or liquid leaks above 500 ppm, measured as methane. District Rule 61.1 specifies that facilities should have no fugitive vapor leaks as defined by Rule 61.0, which currently defines a fugitive vapor leak as greater than or equal to 500 ppmv measured as propane, or 1,375 ppmv measured as methane. In addition, District Rule 61.1, like similar rules of California air districts, does not require doming of external floating roof tanks. If the more stringent requirements of Rule 1178 for roof fittings and doming were to be adopted in the future, emission reductions would be approximately 12 tons of VOC per year, or 0.03 tons per day.

<sup>&</sup>lt;sup>16</sup> No facilities in San Diego County operate under the exemption in Section (b)(3) of the rule, which exempts fixed roof tanks at bulk plants constructed on or before 1979 and that transfer less than five million gallons per year from controlling standing/breathing losses.

<sup>&</sup>lt;sup>17</sup> 60 FR 40285

<sup>&</sup>lt;sup>18</sup> Control of Volatile Organic Emissions from Bulk Gasoline Plants, EPA-450/2-77-035, December 1977. Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks, EPA-450/2-77-036, December 1977. Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA-450/2-78-047, December 1978.

<sup>&</sup>lt;sup>19</sup> All tanks that would be covered under the applicable CTG are covered under Rule 61.1.

## 2.1.4 Rule 61.2

District Rule 61.2 (Transfer of Organic Compounds into Mobile Transport Tanks, July 26, 2000) regulates VOC vapors displaced by loading mobile transport tanks with gasoline and other high volatility fuels from bulk terminals, and from vapor and liquid leaks during the loading process. The EPA approved Rule 61.2 into the SIP on August 26, 2003.<sup>20</sup>



The primary standard of Rule 61.2 requires a 90% emission reduction for displacement of VOC. All systems installed in San Diego County require CARB certification, which requires at least 90% control efficiency. In addition, Rule 61.2 requires the emission rate of all displaced vapors at bulk plants and terminals to not exceed 0.29 pounds of non-methane organic compound per 1,000 gallons of liquid displacing the VOC vapor-air mixtures. This equates to approximately 96% control efficiency. The four local facilities subject to Rule 61.2 comply with the rule: their estimated combined VOC emissions due to vapor displacement total about 12 tons per year.

The applicable CTGs (*Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals*, EPA-450/2-77-026, October 1977, and *Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems*, EPA-450/2-78-051, December 1978) are older but remain in effect. To evaluate RACT, the District compared the emission reductions being achieved under the existing rule, to what the District requires under the CTG. RACT was also evaluated by comparing Rule 61.2 to SJVAPCD Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants, December 19, 2013), which requires a 95% emission reduction for displaced VOC vapors. Since Rule 61.2 requires both CARB certification control efficiency (90%) and 96% control during transfer, the existing rule is as stringent as SJVAPCD Rule 4621, which requires 95% control efficiency.

<sup>&</sup>lt;sup>20</sup> 68 FR 51186

Rule 61.2 contains exemptions that do not significantly impact air quality or are required by federal law. First, Section (b)(1) of the rule exempts transfers of VOCs into mobile transport trucks under 550-gallon capacity. This stems from a separate EPA CTG (*Control of Volatile Organic Emissions from Bulk Gasoline Plants*, EPA-450/2-77-035, December 1977), which states that the CTGs apply to "typical bulk plant facilities" with tank capacities that "range from 50,000 liters (13,000 gallons) to 75,000 liters (19,500 gallons). Furthermore, tanks under 2,000 gallons are typically exempt by the CTG and are not major sources, and thus are not subject to RACT. Second, Section (b)(5) exempts bulk terminals owned by the armed forces from submerged fill requirements during transfers. Federal law does not allow states (or local air districts) to require bottom loading of military transport tanks.

Other nonattainment areas in California have adopted more stringent limits of 0.08 pounds of non-methane organic compound per 1,000 gallons of liquid displacing the VOC vapor-air mixtures, typically for facilities loading more than 20,000 gallons per day.<sup>21</sup> Consequently, the District commits to amending Rule 61.2 in 2021 to satisfy additional RACT requirements and incorporate these possible revisions. Upon amendment of Rule 61.2 and submittal to the EPA (through CARB), the District determines that the proposed amended Rule 61.2 will fully satisfy RACT requirements for the 2008 and 2015 eight-hour ozone standards. The District will continue to work with the EPA to address potential deficiencies relating to SIP approval and demonstrating RACT throughout the rulemaking process.

# 2.1.5 Rules 61.3 and 61.3.1

District Rule 61.3 (Transfer of Volatile Organic Compounds into Stationary Storage Tanks, October 16, 1990) regulates VOC vapors displaced by the transfer of gasoline and other high volatility fuels from mobile transport tanks into stationary storage tanks at vehicle refueling stations, and from vapor and liquid leaks during the transfer process (Stage I Vapor Recovery). The applicable CTG, which Rule 61.3 meets, is *Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations* (EPA-450/R-75-102, November 1975). The EPA approved Rule 61.3 into the SIP on June 30, 1993.<sup>22</sup>



Rule 61.3. and 61.3.1 minimize VOC emissions between mobile fueling tanks and storage tanks at fueling stations.

Subsequently, CARB adopted California's Enhanced Vapor Recovery program regulations to implement advanced state-of-the-art vapor control technology. In response, the District

 <sup>&</sup>lt;sup>21</sup> Other air districts include but are not limited to, South Coast Air Quality Management District (SCAQMD) Rule 462, Antelope Valley (AVAQMD) Rule 462, Mojave Desert (MDAQMD) Rule 462, Placer County Air Pollution Control District (PCAPCD) Rule 215, Sacramento Metro (SMAQMD) Rule 447, and San Joaquin Valley APCD (SJVAPCD) Rule 4624.
<sup>22</sup> 58 FR 34906

adopted Rule 61.3.1 (Transfer of Gasoline into Stationary Underground Storage Tanks) on March 1, 2006. While Rule 61.3 applies to both aboveground and underground storage tanks, Rule 61.3.1 applies only to underground storage tanks. Consequently, Rule 61.3.1 supplements, but does not replace Rule 61.3, as RACT for Stage I vapor recovery, and is being submitted to the EPA with this RACT SIP submittal.

# 2.1.6 Rules 61.4 and 61.4.1

District Rule 61.4 (Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks, March 26, 2008) and Rule 61.4.1 (Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks, March 26, 2008) regulate VOC vapors displaced by the filling of vehicle gasoline tanks at vehicle refueling stations, and from vapor and liquid leaks during the transfer process (Stage II Vapor Recovery). The EPA has not issued a CTG for Stage II vapor recovery, and vehicle refueling stations are not major VOC sources.<sup>23</sup> Stage II vapor recovery is instead subject to the separate gasoline vapor recovery requirements of CAA §182(b)(3). The EPA originally approved Rule 61.4 into the SIP on May 13, 1993,<sup>24</sup> fulfilling the requirements of



Rule 61.4. and 61.4.1 minimize VOC emissions between fueling stations and vehicle fuel tanks.

CAA §182(b)(3). Subsequently, to incorporate On-Board Vehicle Refueling Vapor Recovery (ORVR) requirements, the District amended Rule 61.4 on March 26, 2008, which was approved into the SIP on January 7, 2013,<sup>25</sup> further fulfilling these requirements.

Concurrently, CARB adopted California's Enhanced Vapor Recovery program regulations to implement advanced state-ofthe-art vapor control technology. These regulations were adopted by the District as Rule 61.4.1 on March 1, 2006. However, because Stage II Vapor Recovery is not subject to RACT requirements, Rule 61.4.1 is not being submitted to the EPA with this RACT SIP submittal.

<sup>24</sup> 58 FR 28354

<sup>&</sup>lt;sup>23</sup> Attachment D notes several large facilities being applicable to Rule 61.4.1. However, none of these facilities, nor other smaller facilities subject to Rule 61.4.1 in San Diego County, have the potential to emit 25 tons of VOC per year attributable solely to vehicle refueling operations. The facility with the highest amount of vehicle refueling operation emissions has never emitted more than 16 tons of VOC per year since inception, and would be incapable of emitting 25 tons of VOC per year without major modifications to their permit. As such, the District determines that there are no major sources applicable to Rule 61.4.1.

<sup>&</sup>lt;sup>25</sup> 78 FR 898

# 2.1.7 Rules 61.5 through 61.8

District Rules 61.5 through 61.8 do not represent RACT for separate source categories. Instead, they contain supplemental non-RACT requirements pertaining to the sources subject to Rules 61.1 through 61.4.1. Rule 61.5 (Visible Emission Standards for Vapor Control Systems, September 20, 1978) was approved into the SIP on April 14, 1981.<sup>26</sup> Rule 61.7 (Spillage and Leakage of Volatile Organic Compounds, January 13, 1987) and Rule 61.8 (Certification Requirements for Vapor Control Equipment, January 13, 1987) were approved into the SIP on March 11, 1998.<sup>27</sup> Rules 61.5, 61.7 and 61.8 will remain in the SIP. Rule 61.6 (NSPS Requirements for Storage of Volatile Organic Compounds, January 13, 1987) is not being submitted to the EPA with this RACT SIP submittal.

# 2.1.8 Rule 64

District Rule 64 (Reduction of Animal Matter, August 21, 1981) regulates VOC emissions from the rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating of animal matter. EPA approved Rule 64 into the SIP on July 6, 1982.<sup>28</sup> Rule 64 is not subject to the RACT requirements of CAA §182(b)(2) because the EPA has not issued a CTG for the source category, and the facilities performing such operations in San Diego County are not major VOC sources.

## 2.1.9 Rule 66.1

Rule 66.1 (Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds, amended May 11, 2016) is used as a "catch-all" regulation due to the adoption of several other VOC prohibitory rules which already contain category-specific surface preparation and equipment cleaning limits within each rule. More specifically, Rule 66.1 today provides more stringent emission limits for 1) facility-wide wipe cleaning operations; 2) coating-related surface preparation and equipment cleaning not otherwise covered by other air district prohibitory rules; 3) solvent use not otherwise covered by other District prohibitory rules, such as distillation, asbestos abatement, and/or electronic manufacturing operations; and 4) miscellaneous operations that may emit small amounts of VOC, such as soil remediation.

The EPA originally approved Rule 66.1 into the SIP on August 9, 2012.<sup>29</sup> The District revised Rule 66.1 on May 11, 2016, to modify exemption thresholds and add new categories for previously exempt operations. At the time, the amended version of Rule 66.1 was submitted to the EPA in 2016 for inclusion in the SIP. However, the District submitted a formal request

<sup>&</sup>lt;sup>26</sup> 46 FR 21757 <sup>27</sup> 63 FR 11831

<sup>28 47</sup> FR 11031

<sup>&</sup>lt;sup>28</sup> 47 FR 29233 <sup>29</sup> 77 FR 47536

to CARB on April 28, 2020, to withdraw the 2016 SIP submittal with respect to the amended version of Rule 66.1. CARB submitted the withdrawal request to the EPA on June 12, 2020.

As part of this RACT Demonstration, a new analysis was conducted. The District determined that there continues to be two CTG's applicable to the category covered by Rule 66.1. Those include:

- 1. Control Techniques Guidelines for Industrial Cleaning Solvents, EPA-453/R-06-001, September 2006, and
- 2. Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003, September 2008

The District determined that all applicable requirements found in these CTGs above are found in other District SIP-approved rules as follows:

- The first CTG's (EPA-453/R-06-001) emissions limits are covered within Rules 67.6.1 (which regulates cold solvent cleaning/degreasing operations), and 67.6.2 (which regulates vapor solvent cleaning/degreasing operations). An EPA 2007 approval notice confirmed this for those specific rules. Both rules were approved into the SIP on October 13, 2009.<sup>30</sup>
- The second CTG's (EPA-453/R-08-003) applicable metal parts emission limits (i.e. Table 2) are covered within Rule 67.3 (Metal Parts). Limits found in the CTG for plastic parts (i.e. Tables 3-6) need not be incorporated because the District determined they was either no use of such products in San Diego County, or plastic part coating facilities didn't emit above the CTG applicability threshold of 15 pounds of VOC per day For example, the District determined there are no pleasure craft refinishing operations emitting over the applicability threshold for pleasure craft refinishing limits found in Table 5 to be applicable. Therefore, those limits were not incorporated. Thus, a negative declaration is being proposed in the 2020 RACT SIP specifically for Tables 3-6 of this CTG.

In terms of major sources, approximately 170 companies were subject to Rule 66.1 at time of adoption, most of which were very small operations emitting well under five tons/year of VOC. Two large facilities at the time (a golf equipment manufacturer and a military facility) emitted over 50.9 and 19.1 tons/year of VOC, respectively, from operations specifically subject to Rule 66.1. However, both facilities have significantly modified operations to curtail VOC emissions with the adoption of Rule 66.1, as noted below:

- The golf equipment manufacturer has since restructured operations and has emitted less than six tons/year of VOC since 2012 for the entire facility, demonstrating a pattern of operational consistency.
- The military facility reduced VOC emissions from the use of lower-VOC aerospace solvent cleaning products. Former Rule 66 had allowed the military facility to use aerospace solvent cleaning products up to 790 grams/liter.

<sup>30</sup> 74 FR 52427

However, upon adoption of Rule 66.1 in 2010, the military facility was then required to use aerospace cleaning products only up to 200 grams/liter. This resulted in the facility now emitting no more than six tons/year of VOC from operations subject to Rule 66.1.

As such, no facilities in San Diego County currently meet the major source threshold applicable for RACT, as well the RACT threshold that was in place at the time of the 2016 RACT SIP was submitted to the EPA. Furthermore, the District believes the applicable solvent cleaning and metal parts CTG requirements are fully addressed elsewhere in other SIP-approved District rules, and plastic parts CTG requirements do not require inclusion in the SIP for San Diego County. As such, the District determines Rule 66.1 is no longer subject to RACT requirements. Though Rule 66.1 is no longer subject to RACT requirements, the District will retain the already approved version of Rule 66.1 in the SIP, as it was approved by the EPA on August 9, 2012.<sup>31</sup> The District submitted a formal request to CARB on April 28, 2020, to withdraw the August 22, 2016, SIP submittal with respect to the amended version of Rule 66.1. CARB submitted the withdrawal request to the EPA on June 12, 2020.

# 2.1.10 Rule 67.0.1

Architectural coatings include a variety of residential, commercial and industrial primers, sealers and other paints. coatings which, when applied, emit VOCs. The District regulates architectural coatings under Rule 67.0.1, adopted on June 24, 2015. Rule 67.0.1 incorporated the tighter VOC limits of CARB's 2007 Suggested Control Measure (SCM) and added new coating, sealer, membrane, and primer categories. The EPA approved Rule 67.0.1 into the SIP on October 4, 2016.<sup>32</sup> Rule 67.0.1 is not subject to the RACT requirements of CAA §182(b)(2), because the EPA has not issued a CTG for the source category. Instead, the EPA issued a national rule pursuant to CAA §183. Furthermore, architectural coating operations are considered area sources, not major VOC sources.



<sup>31</sup> 77 FR 47536 <sup>32</sup> 81 FR 68320

## 2.1.11 Rule 67.1

District Rule 67.1 (Alternative Emission Control Plans, May 15, 1996) does not represent RACT for a separate source category. Instead, it provides an alternative method for demonstrating compliance with the requirements of Rules 67.3, 67.4, 67.5, 67.9, 67.11, 67.16, and 67.18. Rule 67.1 was approved into the SIP on March 27, 1997.<sup>33</sup>

#### 2.1.12 Rule 67.2

District Rule 67.2 (Dry Cleaning Equipment Using Petroleum-Based Solvent, May 15, 1996) regulates VOC emissions from dry cleaning operations using petroleum-based solvents. The EPA approved Rule 67.2 into the SIP on March 27, 1997.<sup>34</sup> Because the applicable CTG (*Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners*, EPA-450/3-82-009, September 1982) is older, RACT was evaluated by comparing Rule 67.2 to SCAQMD Rule 1102 (Dry Cleaners Using Solvent Other Than Perchloroethylene, November 17, 2000) as well to the applicable older CTG. The analysis concluded that District Rule 67.2 is as stringent as SCAQMD Rule 1102.

Due to State requirements phasing out perchloroethylene, no facilities in San Diego County meet the applicability threshold of 123,000 liters of perchloroethylene or petroleum-based solvent use per year established in the CTG. Today, the largest petroleum-based solvent dry cleaners in San Diego County are small operations that use a maximum of 7,500 liters (or around 2,000 gallons). Larger industrial dry cleaning operations have all switched to more environmentally friendly products that are not petroleum-based (i.e. wet cleaning) or have outsourced operations out of the country or County. Any new petroleum solvent dry cleaning operation with significant potential emissions will be subject to New Source Review (NSR), which requires BACT. Consequently, the District determines that the County has no applicable sources meeting the CTG criteria and is no longer required to meet RACT requirements for the source category. Nonetheless, the District will retain Rule 67.2 in the SIP, as approved on March 27, 1997, to continue progress towards attaining the 2008 and 2015 eight-hour ozone standards.

#### 2.1.13 Rule 67.3

District Rule 67.3 (Metal Parts and Products Coating Operations, April 9, 2003) regulates VOC emissions from metal parts and products coating operations. The EPA approved Rule 67.3 into the SIP on November 14, 2003.<sup>35</sup> Because the applicable CTG (*Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003, September 2008) was recently issued, RACT was evaluated by comparing Rule 67.3 to the CTG. One specialty coating limit found in Rule 67.3 (chemical agent resistant coatings, or

 <sup>&</sup>lt;sup>33</sup> 62 FR 14639
<sup>34</sup> 62 FR 14639
<sup>35</sup> 68 FR 64538

CARC) has a VOC limit that exceeds the CTG requirements. Rule 67.3 requires CARC to not exceed 420 grams of VOC per liter when air-dried, or 420 grams of VOC per liter when baked. Because limits for CARC are not specified by EPA in the CTG, it can be construed that CARC limits should adhere to the "general" coating limit found in the CTG (340 grams of VOC per liter (air-dried) or 280 grams of VOC per liter when baked).

However, additional analysis by the District determined that historical CARC use in San Diego County was conservatively estimated to be no more than 1.4% of the total emission inventory for miscellaneous metal and plastic parts coatings countywide.<sup>36</sup> Consequently, its limited use produces a negligible impact to miscellaneous metal and plastic part coating emissions, and even less of an impact to total countywide VOC emissions. Furthermore, Rule 67.3 remains as stringent as all other metal parts coating recommendations in the CTG. Consequently, the District determines that Rule 67.3, as approved into the SIP on November 14, 2003, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

#### 2.1.14 Rule 67.4

District Rule 67.4 (Metal Container, Metal Closure and Metal Coil Coating Operations, November 9, 2011) regulates VOC emissions from coating of cans and coils. Because the applicable CTG (*Control of Volatile Organic Emissions from Existing Stationary Sources, Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks*, EPA-450/2-77-008, May 1977) is older, RACT was evaluated by comparing Rule 67.4 to SJVAPCD Rule 4604 (Can and Coil Coating Operations, September 20, 2007), as well to the applicable older CTG. All coating and solvent cleaning VOC content limits in Rule 67.4 are at least as stringent as those found in the SJVAPCD rule. The EPA approved Rule 67.4, last amended on November 9, 2011, into the SIP on September 20, 2012.<sup>37</sup> Consequently, the District determines that amended Rule 67.4 continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

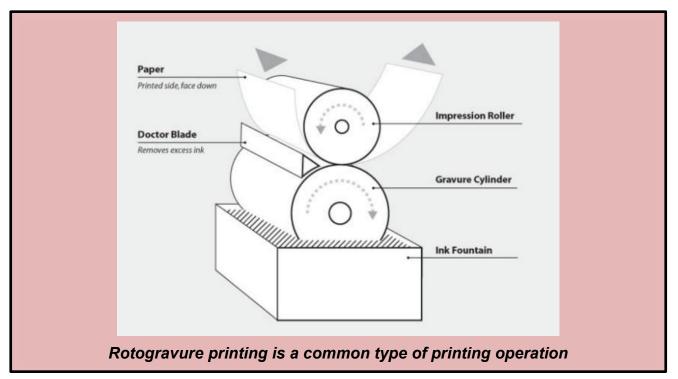
#### 2.1.15 Rule 67.5

District Rule 67.5 (Paper, Film and Fabric Coating Operations, May 15, 1996) regulates VOC emissions from paper, film and fabric coating operations. The EPA approved Rule 67.5 into the SIP on March 27, 1997.<sup>38</sup> RACT was evaluated by comparing Rule 67.5 to the applicable CTG (*Control Techniques Guidelines for Paper, Film, and Foil Coatings*, EPA-453/R-07-003, September 2007), in addition to SCAQMD Rule 1128 (Paper, Fabric, and Film Coating

<sup>&</sup>lt;sup>36</sup> A total of 19 companies use metal parts coatings subject to Rule 67.3 in the County. However, only one facility *may* use CARC, though its usage was inconclusive based on available inventory data. For a conservative estimate, the District assumed all emissions from the facility were CARC, equating to 1.1 tons. In reality, the facility uses many different products, so any use of CARC on-site is very likely a small fraction of 1.1 tons.

<sup>&</sup>lt;sup>37</sup> 77 FR 58313

<sup>&</sup>lt;sup>38</sup> 62 FR 14639



Operations, March 8, 1996) and SJVAPCD Rule 4607 (Graphic Arts and Paper, Film, Foil, and Fabric Coatings, December 18, 2008).

Existing Rule 67.5 remains as stringent as comparable SCAQMD and SJVAPCD rules and the CTG requirement for control efficiency. However, additional analysis indicates that all facilities subject to the rule emit well under the CTG applicability threshold of 25 tons of VOC per year per coating line. The largest coating line from the largest facility has emitted no more than 10 tons of VOC per year since 2014, demonstrating a pattern of operational consistency. The same facility now emits a total of 13 tons of VOC per year from the entire facility, further indicating a substantial curtailment of emissions since the 2016 RACT analysis. As such, the District determines that the County no longer has applicable sources meeting the CTG criteria and is no longer required to meet RACT requirements for the source category. Consequently, a Negative Declaration has been included within Attachment B. Nonetheless, the District will retain Rule 67.5 in the SIP, as approved on March 27, 1997, to continue progress towards attaining the 2008 and 2015 ozone standards.

# 2.1.16 Rules 67.6.1 and 67.6.2

District Rule 67.6.1 (Cold Solvent Cleaning and Stripping Operations, May 23, 2007) and Rule 67.6.2 (Vapor Degreasing Operations, May 23, 2007) regulate VOC emissions from cold solvent cleaning, stripping, and vapor degreasing operations. The EPA approved Rules 67.6.1 and 67.6.2 into the SIP on October 13, 2009, and specified that the rules met RACT requirements.<sup>39</sup>

<sup>&</sup>lt;sup>39</sup> 74 FR 52427

The EPA's 2009 approval notice for Rules 67.6.1 and 67.6.2 indicated that the applicable CTG is the recently issued *Control Techniques Guidelines for Industrial Cleaning Solvents* (EPA-453/R-06-001, September 2006). Taken together, the rules are as stringent as the CTG, and go beyond other California air districts' requirements by mandating that cold solvent cleaning operations using solvents containing exempt compounds (such as acetone) meet the stringent equipment operating requirements of the rules. These requirements include, but are not limited to, a cover for batch loaded cold solvent cleaning operations, and compliance with California Health and Safety Code hazardous waste protocol for waste or recycled solvent.

Nonetheless, Rule 67.6.1 contains an exemption (Section (b)(1)(ii)) that requires revision to fully satisfy RACT requirements for both ozone standards. Additionally, the VOC content limit in Section (b)(1)(vi) and (d)(1) require revision from 50 grams per liter to 25 grams per liter, consistent with other District prohibitory rules. Consequently, the District commits to amending Rule 67.6.1 in 2021 to satisfy additional RACT requirements as noted above. Upon amendment of Rule 67.6.1 and submittal to the EPA (through CARB), the District determines that the proposed amended Rule 67.6.1 and current Rule 67.6.2, will satisfy RACT requirements for the 2008 and 2015 eight-hour ozone standards. The District will continue to work with the EPA to address potential deficiencies relating to SIP approval and demonstrating RACT throughout the rulemaking process.

# 2.1.17 Rule 67.7

District Rule 67.7 (Cutback and Emulsified Asphalts, May 15, 1996) regulates VOC emissions from cutback and emulsified asphalts applied on pavements. The EPA approved Rule 67.7 into the SIP on March 27, 1997.<sup>40</sup> Because the applicable CTG (*Control of Volatile Organic Compounds from Use of Cutback Asphalt*, EPA-450/2-77-037, December 1977) is older, RACT was evaluated by comparing Rule 67.7 to SJVAPCD Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations, December 17, 1992), as well to the applicable older CTG. Rule 67.7 is as stringent as SJVAPCD Rule 4641. Consequently, the District determines that Rule 67.7, as approved into the SIP on March 27, 1997, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

# 2.1.18 Rule 67.9

District Rule 67.9 (Aerospace Coating Operations, April 30, 1997) regulates VOC emissions from coating of aerospace components. Rule 67.9 was approved into the SIP on August 17, 1998.<sup>41</sup> Rule 67.9 has generally analogous coating limitations with SCAQMD Rule 1124 (Aerospace Assembly and Component Manufacturing Operations, September 21, 2001), with a few variations in limits for specialty coatings or adhesives. For example, SCAQMD Rule 1124 includes limits for new commercial aircraft adhesive bonding primers; no such limit in San Diego County is necessary because local aerospace manufacturing operations have

<sup>40</sup> 62 FR 14639 <sup>41</sup> 63 FR 43884 ceased. All existing operations now primarily involve maintenance and rework. Emissions in this source category have greatly declined in San Diego County since 1990 due to three factors: the implementation of Rule 67.9, the decline in government funding for aerospace operations, and in particular, the closing of one large facility.

The applicable CTG for this source category is *Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations* (EPA-453/R-97-004, December 1997). The CTG applicability language states that it "has been developed for affected sources in areas of Moderate or above [...] nonattainment that have the potential to emit greater than or equal to 25 tons per year of VOC's." Discussion with EPA staff further confirmed the CTG applicability threshold applies only to aerospace-related emissions. Therefore, if the District determines that all permitted sources have a potential to emit (PTE) less than 25 tons per year of aerospace VOC emissions, the CTG does not apply. The District determines PTE either through specific permit conditions, or through a federally enforceable definition of PTE found in existing District Rule 20.1, approved into the SIP on April 14, 1981.<sup>42</sup>



A total of 29 sites are permitted to utilize aerospace coatings in San Diego County. All sites except one (97%) were determined to have permitted aerospace coating usage limits (PTE) lower than 18 tons per year of VOC. This is significantly more stringent than the CTG applicability threshold requirement, which is 25 tons per year. Sites were determined to be sources of emissions based on standard District protocol or through other EPA Guidance, as

<sup>&</sup>lt;sup>42</sup> 46 FR 21757

applicable.<sup>43</sup> For the last site (Facility A), the District utilized the District's federally enforceable definition of PTE found in SIP-approved Rule 20.1. The definition relies on historical usage data within a five-year period preceding the most recent emission inventory data available, to determine PTE. Under this definition, Facility A has emitted no more than 14.7 tons per year of aerospace-related VOC emissions since 2006 (a range of approximately thirteen years, well over the required five year analysis period).<sup>44</sup> As such, the District determined that the single remaining site has a federally enforceable PTE limit under the CTG applicability threshold.

Since all facilities in the County have federally enforceable PTE limits less than the CTG applicability threshold of 25 tons per year, the CTG does not apply. Furthermore, any new aerospace coating operation with significant potential emissions would be subject to NSR, which will require BACT.

Since the District has no sources meeting the CTG applicability threshold, the District determines that it is no longer required to meet RACT requirements for the source category. Though the rule is no longer applicable to RACT, the District will retain Rule 67.9 in the SIP to continue progress towards attaining the 2008 and 2015 eight-hour ozone standards.

## 2.1.19 Rule 67.10

District Rule 67.10 (Kelp Processing and Bio-Polymer Manufacturing Operations, June 25, 1997) regulates VOC emissions from kelp processing and bio-polymer manufacturing operations. Rule 67.10 was adopted to apply RACT requirements (at least 81% VOC emissions reduction) to one unique facility that, at the time, was a major source for VOC. The EPA approved Rule 67.10 into the SIP on June 22, 1998.<sup>45</sup> At the time of rule adoption, the facility consisted of two primary operations, which included: (1) processing kelp, and (2) manufacturing bio-polymers for nutraceutical use. Shortly after rule adoption, the kelp processing operation ceased as a result of the company restructuring. The bio-polymer manufacturing, which remains operational today, has significantly lowered VOC emissions; recent emission inventory data confirms the facility emitted less than 39 tons of VOC or NOx per year since 2011. Because Rule 67.10 and the source it regulates is unique, there are no comparable rules at other California air districts to compare it to. Consequently, the District determines that Rule 67.10, as approved into the SIP on June 22, 1998, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

<sup>&</sup>lt;sup>43</sup> Seitz, John S. "Memorandum - Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act (Act)." U.S. Environmental Protection Agency. OAQPS, 2 Aug. 1996. Web. 23 Feb. 2016. <u>https://www.epa.gov/sites/production/files/2015-08/documents/dodguid.pdf</u>.

<sup>&</sup>lt;sup>44</sup> For reference, Facility A has never exceeded the CTG applicability threshold of 25 tons per year of aerospace coating use, based on all available emission inventory data. Aerospace-related VOC emissions from Facility A since 2006 are 6.5 tons/year (2014), 14.6 tons/year (2013), 3.6 tons/year (2009), 7.7 tons/year (2008), 7.4 tons/year (2007), and 8.3 tons/year (2006).

<sup>&</sup>lt;sup>45</sup> 63 FR 33854

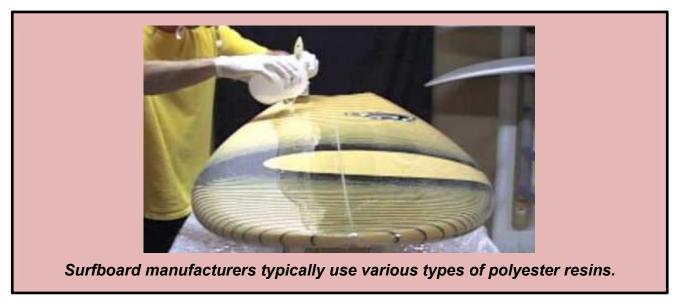
### 2.1.20 Rule 67.11

Wood coatings include a variety of primers, stains, sealers, and varnishes which, when applied to wood products such as cabinets and furniture, release VOC emissions. This source category is regulated under District Rule 67.11 (Wood Products Coating Operations, June 27, 2012). Rule 67.11 was originally adopted in 1989 prior to an applicable CTG being adopted. In 1996, the EPA issued a CTG for the source category (*Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations* (EPA-453/R-96-007, April 1996; see also 61 FR 25223, May 20, 1996, and 61 FR 50823, September 27, 1996).

RACT was evaluated for Rule 67.11 by comparing the rule to the CTG and SCAQMD Rule 1136 (Wood Products Coatings, June 14, 1996). SCAQMD amended Rule 1136 to enact technology-forcing VOC content limits at the time in several coating categories. The limits were lower than those found in most other California air districts. As a result, Rule 67.11 was updated on June 27, 2012, to incorporate the tighter VOC limits found in SCAQMD Rule 1136, applicable CTG limits, as well as to incorporate controls for large wood coating operations for ease of implementation. The EPA approved amended Rule 67.11 into the SIP on April 11, 2013.<sup>46</sup> All requirements of the applicable CTG, and tighter emission limits found in other air district counterpart rules, are now incorporated in amended Rule 67.11. Because the EPA approval was recent, amended Rule 67.11 is determined to represent RACT for the 2008 and 2015 eight-hour ozone standards.

#### 2.1.21 Rule 67.12.1

Polyester resin materials are gel coats, resins, and cleaning solvents used in the manufacture of aerospace components, synthetic marble products, surfboards, boats and other products.



#### <sup>46</sup> 78 FR 21538

Polyester resin operations release VOC emissions and are regulated Rule 67.12.1 (Polyester Resin Operations), adopted on May 11, 2016. EPA approved Rule 67.12.1 into the SIP effective May 2, 2018.<sup>47</sup> Though a CTG covers a category of sources regulated by this rule (*Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials* (EPA-453/R-08-004, September 2008), the District does not have any operations with actual emissions exceeding the CTG's applicability threshold of 15 lbs/day, or 2.7 tons/year. The largest source of emissions from a fiberglass boat facility is under 0.5 tons per year. Therefore, the CTG does not apply, and a Negative Declaration for the CTG is included within this Demonstration in Attachment B.

As such, RACT was assessed by comparing Rule 67.12.1 to SCAQMD Rule 1162 (Polyester Resins Operations, July 8, 2005) for operations producing products other than boats. At the time of adoption, Rule 67.12.1 incorporated the lower monomer limits and applicable new materials found within SCAQMD Rule 1162. Because the SIP approval was so recent, new District Rule 67.12.1 is determined to represent RACT for the 2008 and 2015 eight-hour ozone standards.

# 2.1.22 Rule 67.15

District Rule 67.15 (Pharmaceutical and Cosmetic Manufacturing Operations, May 15, 1996) regulates VOC emissions from pharmaceutical and cosmetic manufacturing operations. The EPA approved Rule 67.15 into the SIP on March 27, 1997.<sup>48</sup> The applicable CTG for the source category (*Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products*, EPA-450/2-78-029, December 1978) applies to synthesized pharmaceutical manufacturing facilities where VOC emissions from vents from reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers emit 15 pounds or more of VOC per day. No pharmaceutical manufacturing facilities in San Diego County emit above this level. Most are involved in biotechnology which are not covered by the CTG. Thus, the CTG does not apply to this rule.

Since no CTG is applicable for the source category, and because there are no major sources in the region, the District determines that Rule 67.15 is no longer subject to RACT requirements of the CAA. Though the rule is no longer applicable to RACT, the District will retain Rule 67.15 in the SIP to continue progress towards attaining the 2008 and 2015 eight-hour ozone standards.

# 2.1.23 Rule 67.16

Graphic arts operations involve the use of inks, cleaning solvents, and other materials in the printing and publishing industry. These operations are a source of VOC emissions and are regulated under District Rule 67.16 (Graphic Arts Operations, November 9, 2011). For RACT, Rule 67.16 was compared to *Control Techniques Guidelines for Offset Lithographic Printing* 

<sup>47</sup> 83 FR 13869 <sup>48</sup> 62 FR 14639 and Letterpress Printing (EPA-453/R-06-002, September 2006) and Control Techniques Guidelines for Flexible Package Printing (EPA-453/R-06-003, September 2006). Rule 67.16 was updated on November 9, 2011, to establish tighter VOC limits found in the CTGs. One such requirement included in the CTGs are limits for heatset web offset printing operations. Requirements for heatset web offset printing operations were not adopted in the amendment because San Diego County has no facilities that perform such operations. All facilities are sheet-fed offset operations. Furthermore, the EPA concluded in subsequent correspondence that Rule 67.16 met RACT at the time of amendment. The EPA approved amended Rule 67.16 into the SIP on September 20, 2012,<sup>49</sup> and noted that the rule was acceptable for meeting RACT requirements. Consequently, the District determines that amended Rule 67.16 continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

## 2.1.24 Rule 67.17

District Rule 67.17 (Storage of Materials Containing Volatile Organic Compounds, May 15, 1996) does not regulate a separate source category. Instead, it supplements and supports all other District rules by requiring that any VOC-containing materials, including rags and wastes, be transferred and stored only in closed containers. Rule 67.17 was approved into the SIP on March 27, 1997.<sup>50</sup> Rule 67.17 fulfills the corresponding provisions included in the general house-keeping work practices recommendations of various CTGs. Accordingly, the District determines that Rule 67.17, as approved into the SIP on March 27, 1997, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

#### 2.1.25 Rule 67.18

District Rule 67.18 (Marine Coating Operations, May 15, 1996) regulates VOC emissions from coating of marine vessels, ships and pleasure boats. Rule 67.18 was approved into the SIP on March 27, 1997.<sup>51</sup> For RACT, Rule 67.18 was compared to both *Control Techniques Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating)* (published in 61 FR 44050 on August 27, 1996, along with EPA-453/R-94-032, April 1994), and the pleasure boat coating emission limits in the *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, (EPA-453/R-08-003, September 2008). The rule was also compared to SCAQMD Rule 1106 (Marine Coating Operations, January 13, 1995) for coating of ships. Rule 67.18 covers coating operations for both commercial and non-commercial (pleasure craft) ships.

 <sup>&</sup>lt;sup>49</sup> 77 FR 58313
<sup>50</sup> 62 FR 14639
<sup>51</sup> 62 FR 14639

For pleasure craft, the EPA recommends the Miscellaneous Metal and Plastic Parts Coating CTG be applied to "each miscellaneous metal product and plastic parts surface coating unit at a facility where the total actual VOC emission from all miscellaneous metal product and plastic parts surface coating operations, including related cleaning activities, at that facility are equal to or exceed 6.8 kg/day (15 pounds per day), or an equivalent level of 2.7 tons per 12-month rolling period, before consideration of controls."<sup>52</sup> Based on historical and recent emission inventory data, the District determined that eight facilities in San Diego County perform pleasure craft refinishing operations, with a subset also performing some small manufacturing

operations. Since 2010, six of the eight facilities have consistently demonstrated total coating and cleaning material use of less than five pounds of VOC per day before controls. The remaining two facilities respectively have emitted 13.2 and 12.1 pounds of VOC per day before controls, based on recent inventory data. The two facilities have each emitted no more than 13.2 pounds of VOC per day since 2007, establishing a pattern of operational consistency.



Marine coatings are frequently used in San Diego County

For informational purposes only, the District also assessed coating limits found in the Miscellaneous Metal CTG. Virtually all coating limits already meet or are more stringent than the CTG's recommendations. Nonetheless, since all pleasure craft refinishing/manufacturing facilities in San Diego County have consistently demonstrated usage of less than 15 pounds of VOC per day since 2007, the District determines the Miscellaneous Metal and Plastic Parts Coating CTG does not apply for pleasure craft refinishing and manufacturing operations in San Diego County, and thus the District is not required to meet associated RACT requirements for Rule 67.18. A Negative Declaration has thus been included in Attachment B for this specific CTG. Therefore, a RACT determination for the source category must only be demonstrated through review of the Shipbuilding and Ship Repair Operations (Surface Coating) CTG and comparable rules from other California air districts.

The Shipbuilding and Ship Repair Operations (Surface Coating) CTG was adopted in 1994. Since the applicable CTG is older, the District evaluated Rule 67.18 against applicable CTG requirements and SCAQMD Rule 1106 (Marine Coating Operations). The source category remains subject to RACT since several non-pleasure craft refinishing facilities emit over the CTG applicability threshold. These facilities consist exclusively of commercial and military vessel refinishing, and do not perform pleasure craft operations. The District determined that VOC coating limits in Rule 67.18 were equivalent or more stringent than the Shipbuilding CTG.

<sup>&</sup>lt;sup>52</sup> EPA-453/R-08-003, September 2008, Page 3.

Furthermore, coating limits found in SCAQMD Rule 1106 (Marine Coating Operations) were generally equivalent to the limits in Rule 67.18 in most coating categories. In fact, Rule 67.18 was found to be more stringent than the CTG or Rule 1106 in several coating categories, including antennas, antifoulants for aluminum substrates, high gloss (baked), pretreatment wash primers, and special markings. Since Rule 67.18 VOC emission limits are equivalent or more stringent to those in the applicable CTG and SCAQMD Rule 1106, the District determines that existing Rule 67.18, as approved into the SIP on March 27, 1997, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

## 2.1.26 Rule 67.19

District Rule 67.19 (Coatings and Printing Inks Manufacturing Operations, May 15, 1996) regulates VOC emissions from coatings and printing inks manufacturing operations at one facility located in San Diego County. The EPA approved Rule 67.19 into the SIP on May 26, 2000.<sup>53</sup> RACT was evaluated by comparing Rule 67.19 to SCAQMD Rule 1141.1 (Coatings and Ink Manufacturing, November 17, 2000). Rule 67.19 is as stringent as SCAQMD Rule 1141.1. Consequently, the District determines that Rule 67.19, as approved into the SIP on May 26, 2000, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

#### 2.1.27 Rule 67.20.1

Automotive coatings include a variety of primers, clear coatings, and color coatings used in motor vehicle or mobile equipment refinishing operations. These operations are a source of VOC emissions and are regulated under District Rule 67.20.1 (Motor Vehicle and Mobile Equipment Coating Operations, June 30, 2010). Rule 67.20.1 includes the tighter VOC limits of CARB's 2005 SCM for Automotive Coatings.<sup>54</sup> Furthermore, Rule 67.20.1 remains as stringent as SCAQMD Rule 1151 (Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations, September 5, 2014).

There are no motor vehicle assembly plants in San Diego County. Thus, the *Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings* (EPA-453/R-08-006, September 2008) does not apply. The District determined that motor vehicle coating operations in San Diego County are primarily vehicle refinishing operations that are not large enough to be major VOC sources. The largest permitted refinishing facility emitted under 4 tons per year of VOC in recent surveys, and permit conditions limit the facility to emit no more than 15 tons of VOC per year. Since no CTG is applicable for the source category, and because there are no major sources in the region, the District determines that Rule 67.20.1 is not subject to RACT requirements of the CAA, and is not being submitted with this RACT SIP submittal. A Negative Declaration has thus been included in Attachment B for this specific CTG.

<sup>&</sup>lt;sup>53</sup> 65 FR 34101

<sup>&</sup>lt;sup>54</sup> CARB SCM for Automotive Coating Operations, October 20, 2005.

## 2.1.28 Rule 67.21

District Rule 67.21 (Adhesive Materials Application Operations, May 14, 2008) regulates VOC emissions from the use of adhesives. The EPA approved Rule 67.21 into the SIP effective March 26, 2020.<sup>55</sup> Because the applicable CTG (Control Techniques Miscellaneous Guidelines for Industrial Adhesives, EPA-453/R-08-005, September 2008) is older, RACT was evaluated by comparing Rule 67.21 against the CTG, as well as SJVAPCD Rule 4653 (Adhesives and Sealants, September 16, 2010). Rule 67.21 is subject to the RACT requirements of CAA §182(f), because applicable products are being utilized at major VOC sources. Coating limits found in SJVAPCD Rule 4653 are generally equivalent to the limits in Rule 67.21 in virtually all coating categories.

For CTG comparison, the District determined that only two facilities in San Diego County emit above the CTG applicability threshold (three tons of VOC per year). One facility uses a PVC



welding adhesive for which Rule 67.21 has a VOC content limit of 510 grams per liter.<sup>56</sup> This limit is slightly higher than the CTG recommended limit of 500 grams per liter. The emissions that would be in excess of the CTG recommendation, calculated from this facility's annual adhesive usage data, would be 0.075 tons per year, a negligible amount.

The second facility uses an elastomeric adhesive with a VOC content of 747 grams per liter (g/l) in order to meet specific performance and safety criteria for their product – life-preserving equipment.<sup>57</sup> This adhesive is essential in the bonding of rubber-based materials. The CTG does not recommend a specific limit for elastomeric adhesives, other than to classify it as a "specialty adhesive" in Appendix B of the CTG. Thus, the Rule 67.21 limit can be considered more stringent than the recommended CTG limit. Furthermore, of the 14 California air districts noted in the CTG, San Diego County and SJVAPCD are the only Districts with a VOC content limit for elastomeric adhesive is also being utilized in that region for life-preserving equipment, per the definition found in SJVAPCD Rule 4653.

<sup>&</sup>lt;sup>55</sup> 85 FR 10611

<sup>&</sup>lt;sup>56</sup> For reference, the current VOC content limits for PVC welding adhesives in both District Rule 67.21 and SJVAPCD Rule 4653 are both 510 grams per liter.

<sup>&</sup>lt;sup>57</sup> For reference, the current VOC content limits for Elastomeric adhesives in both District Rule 67.21 and SJVAPCD Rule 4653 are both 750 grams per liter.

Rule 67.21 also regulates a wider universe of sources than the CTG, including all sealants and sealant primers. Furthermore, the applicability threshold of Rule 67.21 is much lower, equivalent to 55 gallons per year (or a VOC emission threshold of 0.2 tons per year), offsetting the additional emissions emanating from the two subject facilities using PVC welding and elastomeric adhesive. Additionally, the EPA approval of Rule 67.21 into the SIP effective March 26, 2020, noted that the rule was consistent with RACT requirements. Consequently, because the EPA approval was so recent, and because Rule 67.21 is virtually identical to SJVAPCD Rule 4653, Rule 67.21 is determined to represent RACT for the 2008 and 2015 eight-hour ozone standards.

## 2.1.29 Rule 67.22

District Rule 67.22 (Expandable Polystyrene Foam Products Manufacturing Operations, May 15, 1996) regulates VOC emissions from expandable polystyrene foam products manufacturing operations. The EPA has not issued a CTG for the source category. At the time the rule was developed, one facility in San Diego County with polystyrene foam products manufacturing operations was a major VOC source. However, that operation has ceased and there are no longer any sources in the area subject to Rule 67.22. Consequently, Rule 67.22 is not subject to the RACT requirements of the CAA §182(b)(2). Accordingly, Rule 67.22 is not being submitted with this RACT SIP submittal.

#### 2.1.30 Rule 67.24

District Rule 67.24 (Bakery Ovens, May 15, 1996) regulates VOC emissions from bakery ovens. The EPA approved Rule 67.24 into the SIP on March 27, 1997.<sup>58</sup> One facility was historically a major VOC source at the time of rule adoption. The rule requires VOC emissions to be reduced by at least 90%. There are no CTGs applicable to the source category.

To evaluate whether the rule is still applicable to RACT requirements, an analysis was conducted on permitted facilities to determine if they emit VOC's above the major source threshold. Three facilities are currently subject to Rule 67.24 in San Diego County. The two smaller facilities are each limited via permit condition to emit no more than 7.9 tons of VOC per year. For the third facility, the District utilized the District's federally enforceable definition of PTE found in SIP-approved Rule 20.1. As mentioned in the analysis for Rule 67.9, the definition relies on historical usage data within a five-year period preceding the most recent emission inventory data available, to determine PTE. Under this definition, the third facility has emitted no more than 2.5 tons per year of bakery oven-related VOC emissions since 2013 (a range of approximately six years).<sup>59</sup> As such, the District determined that the third facility has a federally enforceable PTE limit well under the threshold to be considered a major source.

<sup>&</sup>lt;sup>58</sup> 62 FR 14639

<sup>&</sup>lt;sup>59</sup> The third facility has never exceeded more than 6.7 tons per year of bakery oven-related VOC emissions, based on approximately 19 years of available emission inventory and source testing data. Additionally, the VOC removal efficiency for the same facility has averaged 98.4% since 2013.

Since no facilities meet the major source threshold applicable for RACT, and because no CTG exists for the source category, the District determines that Rule 67.24 is no longer subject to RACT requirements. Though the rule is no longer applicable to RACT, the District will retain Rule 67.24 in the SIP to continue progress towards attaining the 2008 and 2015 eight-hour ozone standards.



#### 2.1.31 Proposed Rule 67.25

Proposed new District Rule 67.25 seeks to regulate emissions from composting operations. Currently, the District does not specifically regulate emissions from composting operations. These operations emit VOC through decomposition of organic materials (such as green and wood waste, animal manure, and food waste) during chipping and grinding, stockpiling, and composting activities. Moreover, composting activities are expected to increase in the region in response to federal, State, and local mandates for waste diversion and waste reduction. Accordingly, the District is evaluating the feasibility of a proposed measure (preliminarily designated as Rule 67.25) to control VOC emissions from these sources. Nine facilities in San Diego County compost organic material according to recent estimates, all of which use a traditional "windrow" composting method, which involves piling organic matter in long rows and turning them as needed to optimize oxygen or moisture content.

CAA §182(b)(2)(c) requires RACT for "all other major stationary sources of VOC that are located in the area". CAA §302(j) further defines a major stationary source as "[...] any stationary facility or source of air pollutants which directly emits, or has the potential to emit, [25] tons per year or more of any air pollutant (including any major emitting facility or source

of fugitive emissions of any such pollutant, as determined by rule by the [EPA] Administrator)." No federal rule defining sources of fugitive emissions has ever been adopted for RACT purposes, nor has the EPA issued a CTG for the source category. However, the EPA did issue a permitting rule<sup>60</sup> that enumerates 27 source categories where fugitive emissions must be included in the emissions calculations. Composting was not one of the 27 categories listed, signifying that emissions from typical windrow compost operations are not considered a major source. Thus, the source category is not subject to RACT requirements, and as a result, proposed new Rule 67.25 will not be submitted into the SIP upon adoption.

In the future, if new or existing operations were to install "engineered" systems to emit through a dedicated source, further analysis would be necessary to determine whether the facility would be considered a major source. However, since all current facilities operating in San Diego County use open windrows, they are not considered to be a major source. Consequently, should proposed new Rule 67.25 be adopted, the rule would not be subject to RACT.

Several other public agencies in California are concurrently evaluating other compostingrelated directives that address other environmental objectives, such as landfill diversion and water quality. This has resulted in a dynamic regulatory environment that will require close coordination with other local and State agencies, and more importantly, with the affected composting facilities, to ensure that a possible District rule would be feasible, and consistent with other regulatory requirements. The possible proposed rule has not been adopted; therefore, a complete environmental review is deferred until the rule development process, including public review, can occur.

## 2.2 NOx RULES

#### 2.2.1 Rule 68

District Rule 68 (Fuel-Burning Equipment - Oxides of Nitrogen, September 20, 1994) regulates NOx emissions from all non-vehicular fuel-burning equipment with rated heat input capacities of 50 million British Thermal Units per hour (BTU/hour) or more. Rule 68 was approved into the SIP on April 9, 1996.<sup>61</sup> Rule 68 is subject to the RACT requirements of CAA §182(f), because there is fuel-burning equipment at major NOx sources.

Rule 68, when originally adopted in 1971, was the District's only rule regulating NOx emissions. As NOx control technology improved over the years, the District adopted additional rules to regulate separate types of fuel-burning equipment, to supplement, but not entirely replace, Rule 68. Therefore, the District determines that Rule 68, as approved into the SIP on April 9, 1996, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards, in conjunction with the District's other NOx RACT rules (Rule 69 series, discussed below).

<sup>&</sup>lt;sup>60</sup> 40 CFR 51.165(c) <sup>61</sup> 61 FR 15719

## 2.2.2 Rule 68.1

District Rule 68.1 (NSPS Requirements for Oxides of Nitrogen from Fuel Burning Equipment, November 18, 1976) is not a RACT rule. Instead, it simply requires compliance with New Source Performance Standards. Rule 68.1 is not being submitted into the SIP.

#### 2.2.3 Rule 69

District Rule 69 (Electrical Generating Steam Boilers, Replacement Units and New Units, adopted January 18, 1994, and revised December 12, 1995) was adopted to regulate NOx emissions from three power plants that were considered major sources at the time of adoption. Two of the power plants that were previously subject to the rule have ceased operations.



One remaining power plant remains operational, but has been required to significantly modify operations because of policy codified into State law by the California State Water Resources Control Board (SWRCB).<sup>62</sup> The policy required specific power plants to cease using seawater for once-through cooling. The lone remaining power plant subject to Rule 69 was one of the affected facilities referenced in the policy and was thus required by law to take action no later than December 31, 2017. SWRCB later amended the policy to require action no later than December 31, 2018. In response to the policy, the power plant owners elected to install a new natural gas combined-cycle turbine power plant by the revised SWRCB deadline, and concurrently decommissioned the existing plant (including all steam boilers affected by Rule 69). The new power plant was instead subject to NSR and District Rule(s) 69.3 and 69.3.1. Consequently, now that the new turbine-powered plant is operational, no facilities in San Diego County are subject to Rule 69.

As a result, the District is not submitting Rule 69 with this RACT SIP submittal, though existing Rule 69 still represents RACT for the 2008 and 2015 eight-hour ozone standards. Should a new facility subject to Rule 69 be proposed, it will be subject to NSR and BACT.

<sup>&</sup>lt;sup>62</sup> 23 CCR §2922, September 27, 2010.

#### 2.2.4 Rule 69.2

District Rule 69.2 (Industrial and Commercial Boilers, Process Heaters and Steam Generators, September 27, 1994) regulates NOx emissions from industrial and commercial boilers, process heaters, and steam generators with rated heat input capacities of five million BTU/hour or more. Rule 69.2 was approved into the SIP on February 9, 1996.<sup>63</sup> Rule 69.2 is subject to RACT, because there are industrial and commercial boilers at major NOx sources in the region.

Currently, Rule 69.2 exempts units from NOx emission standards with an annual heat input of less than 220,000 therms ( $22 \times 10^9$  BTU), and for units with a heat input rating of less than or equal to 50 million BTU/hour. These units are subject only to operational standards, such as unit maintenance, recordkeeping, and an annual boiler tune-up to minimize NOx emissions to the extent feasible. Facilities with annual heat inputs of 220,000 therms or more (or greater than 10% capacity factor for units with heat input ratings greater than 50 million BTU/hour) must comply with NOx emission standards of 30 ppmv for gas-fired units, and 40 ppmv for oil-fired units. Estimated NOx emissions from boilers five million BTU/hour and larger total about 82 tons per year, with over 99% of the emissions from gas-fired units.

To evaluate RACT, Rule 69.2 was compared to Santa Barbara County APCD (SBCAPCD) Rule 342 (Boilers, Steam Generators and Process Heaters – 5 MMBtu/hr and greater, June 20, 2019). To determine local feasibility and whether the resulting emission reductions would be cost-effective, the District evaluated amending Rule 69.2 to reflect the more stringent Rule 342 emission limits, as well as lowering the exemption level to 90,000 therms per year for gas-fired boilers, per Rule 342.

- Lower Exemption Threshold/Retain Existing Emission Standards. Require that all boilers with annual heat input between 90,000 and 220,000 therms meet the 30-ppmv NOx standard of existing Rule 69.2 and retain the existing 30-ppmv NOx standard for higher usage boilers. This measure would apply to about 29 units with annual heat input between 90,000 and 220,000 therms, requiring installation of low NOx burners and/or flue gas recirculation to meet the 30-ppmv NOx standard.
- 2. Lower Exemption Threshold/Tighten Emission Standards. Require that all boilers with annual heat input of 90,000 therms or more meet more stringent standards of 9 ppmv NOx for units rated at less than or equal to 20 million BTU/hour heat input, and 7 ppmv NOx for units rated at greater than 20 million BTU/hour heat input. These NOx standards and exemption threshold are consistent with those for SBCAPCD Rule 342. This measure would require about 103 units with annual heat input of 90,000 therms or more to install emission controls such as ultra-low NOx burners and/or flue gas recirculation to meet the more stringent limits.
- 3. <u>Retain Existing Exemption Threshold/Tighten Emission Standards</u>. Require that boilers with annual heat input of 220,000 therms or more meet the more stringent (9 ppmv / 7

<sup>&</sup>lt;sup>63</sup> 61 FR 4887

ppmv) NOx standards. Units with annual heat input rates of less than 220,000 therms would remain exempt. This measure would require approximately 74 units with annual heat input of 220,000 therms or more to install emission controls such as ultra-low NOx burners and/or flue gas recirculation to meet the more stringent limits.

For each case, cost-effectiveness values were estimated for each affected unit. The potential emission reductions (averaged over 365 days of operation per year) and cost-effectiveness values for each of the three cases are summarized in Table 1 below:

Case	Potential NOx Emission Reductions (tons/day)	Cost-Effectiveness Range (\$/ton NOx reduced)	Average Cost- Effectiveness (\$/ton NOx reduced)
1	0.03	\$7,800 to \$23,700	\$16,500
2	0.11	\$5,800 to \$207,000	\$51,400
3	0.06	\$5,800 to \$207,000	\$68,400

Table 1Cost-Effectiveness Range (Rule 69.2)

None of the proposed control measure combinations are within the EPA RACT threshold of \$5,000 per ton of NOx reductions. For all three cases, the estimated overall control costs were determined not to represent a reasonably available level of control. An investigation of whether there is any subset of units for which further controls would be cost-effective determined that none of the further control measures were cost-effective for almost every individual boiler. Furthermore, the District determined that adopting similar controls to the proposed measure combinations would exceed the District's recommended cost-effectiveness threshold of \$12,000 per ton of NOx emissions reduced for local Board approval. Poor cost-effectiveness in Cases 1 and 2 results from around 50% of the existing boilers (if the 220,000 therm exemption limit was lowered) already having ultra-low NOx burners and/or flue gas recirculation.

To determine whether more stringent emission limits have been adopted (and found to be cost-effective) in other California air districts, the District reviewed staff and technical reports in relation to SCAQMD Rule 1146 (Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, December 7, 2018), and SJVAPCD 4306 (Boilers, Steam Generators, and Process Heaters, October 16, 2008).<sup>64</sup> According to an EPA technical report following adoption in 2003,<sup>65</sup> SJVAPCD's rule (which was likely considered technology forcing at the time), ranged between \$4,177 to

<sup>&</sup>lt;sup>64</sup> For reference, BACT control measures thresholds for NOx in the respective regions evaluated are: 1) SCAQMD at \$29,500 per ton, 2) SJVAPCD at \$24,500 per ton, 3) VCAPCD at \$18,000 per ton, and 4) SBCAPCD at \$32,000 per ton.

<sup>&</sup>lt;sup>65</sup> O'Connor, Karina et. al. EPA's Technical Support Document for the San Joaquin Valley, California, 2003 PM-10 Plan and 2003 PM-10 Plan Amendments. EPA, 27 January 2004. Web. <u>https://www3.epa.gov/region9/air/sjvalleypm/tsd0104.pdf</u>

\$276,909 per ton of NOx depending on the type and size of the unit. A more recent proxy, SCAQMD's rule, estimated cost-effectiveness between \$17,000 per ton to \$36,000 per ton in a 2018 staff report.<sup>66</sup> Given that most boilers could be controlled within their District's respective cost-effective thresholds, the air districts proceeded with rule amendments. This was not the case in San Diego County, where emission reductions consistent with the District's cost-effectiveness threshold (\$12,000 per ton), were not available for most units. This is further confirmed by Ventura County Air Pollution Control District (VCAPCD) Rule 74.15 (Boilers, Steam Generators and Process Heaters (5 MMBTUs and greater, November 8, 1994), which has retained a NOx limit of 40 ppmv since the mid-1990s. Importantly, Rule 69.2 can be considered more stringent than VCAPCD Rule 74.15, since Rule 69.2 requires gas-fired units to comply with a 30 ppmv NOx standard.

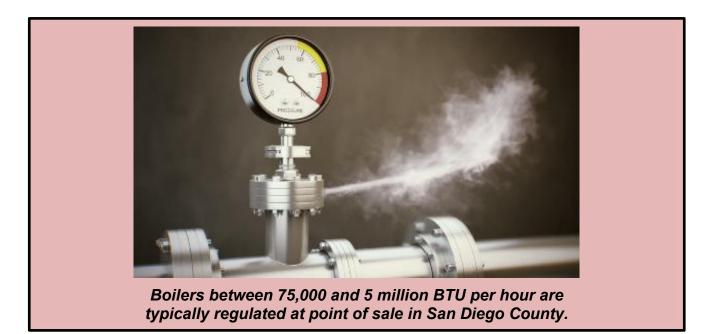
Based on the poor cost-effectiveness and small emission-reduction potential, none of the further control measure combinations found in the Santa Barbara comparable rule are feasible or reasonably available at this time. Therefore, the District determines that Rule 69.2, as approved into the SIP on February 9, 1996, continues to represent RACT for the 2008 and 2015 eight-hour ozone standards.

## 2.2.5 Rule 69.2.1

District Rule 69.2.1 (Small Boilers, Process Heaters, and Steam Generators, March 25, 2009) currently regulates NOx emissions from new small boilers, process heaters, and steam generators with a heat input rating from 600,000 BTU/hour to 2 million BTU/hour at point-of-sale. However, Rule 69.2.1 was amended on July 8, 2020, to regulate additional units down to 75,000 BTU/hour, filling a regulatory "gap" where units were previously unregulated. The amendment proposes to require new and replacement units between 75,000 BTU/hour and 2 million BTU/hour (gaseous-fueled) to be certified to lower NOx emission levels of 20 ppmv. NOx emission limits for new and replacement units between 400,000 BTU/hour and 2 million BTU/hour (liquid-fueled) will also decrease to 30 ppmv. Rule 69.2.1 is subject to RACT, because there is equipment in the category operating at major NOx sources in the region.

<sup>&</sup>lt;sup>66</sup> SCAQMD. Final Staff Report for Proposed Amended Rule 1146. December 2018. Web. <u>http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2018/2018-dec7-028.pdf?sfvrsn=6</u>

There is no CTG applicable to the sources covered by Rule 69.2.1. Thus, the District compared amended Rule 69.2.1 to those of other California air districts, including SCAQMD Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters, December 7, 2018). Amended Rule 69.2.1 was determined to be as stringent for comparable source categories. Consequently, amended Rule 69.2.1 is determined to represent RACT for the 2008 and 2015 eight-hour ozone standards. Amended Rule 69.2.1 will be submitted into the SIP with this RACT SIP submittal.



#### 2.2.6 Rule 69.2.2

There are an estimated 900 boilers rated between 2-5 million BTU/hour in San Diego County, cumulatively emitting an estimated 315 tons per year of NOx.<sup>67</sup> Possible NOx control requirements (similar to those in Rule 69.2.1)<sup>68</sup> for boilers in this size range were evaluated in 2011-12 and determined infeasible due to poor cost-effectiveness. As such, the District postponed adoption of a proposed rule at that time. In 2019, the District reassessed the viability of a proposed rule and determined low-emitting equipment in the size range were now available and cost-effective to purchase. Consequently, new Rule 69.2.2 (Medium Boilers, Process Heaters, and Steam Generators) was adopted on July 8, 2020, to apply to medium-sized new and replacement boilers rated between 2-5 million BTU/hour. New Rule 69.2.2 proposes to require boiler manufacturers to certify new units as meeting a specified NOx emission limit (30 ppmv gaseous, 40 ppmv liquid). Operators of existing units can obtain either

<sup>&</sup>lt;sup>67</sup> The District has not previously regulated units within this size range. Estimates of the number of units and emissions were prorated based on population and other information found within reports from other California air districts.

<sup>&</sup>lt;sup>68</sup> 30 ppmv when operated on a primary gaseous fuel, or 40 ppmv when operated on a primary liquid fuel.

a District permit to operate or a Certificate of Registration. New Rule 69.2.2 is subject to RACT because there is equipment in the category operating at major NOx sources in the region.

There is no CTG applicable to the sources covered by Rule 69.2.2. Thus, to evaluate RACT, new Rule 69.2.2 was compared to SJVAPCD Rule 4307 (Boilers, Steam Generators, and Process Heaters – 2.0 MMBtu/hr to 5.0 MMBtu/hr, April 21, 2016) and SCAQMD Rule 1146.1 (Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, December 7, 2018). The emission limits found in new Rule 69.2.2 match the limits within both respective SCAQMD and SJVAPCD rules. Consequently, new Rule 69.2.2 is determined to represent RACT for the 2008 and 2015 eighthour ozone standards. Rule 69.2.2 will be submitted into the SIP with this RACT SIP submittal.

#### 2.2.7 Rules 69.3 and 69.3.1

District Rule 69.3 (Stationary Gas Turbine Engines – Reasonably Available Control Technology, December 16, 1998) and Rule 69.3.1 (Stationary Gas Turbine Engines – Best Available Retrofit Control Technology, February 24, 2010) currently regulate NOx emissions from stationary gas turbine engines. Rule 69.3 was approved into the SIP on June 17, 1997.<sup>69</sup> On December 16, 1998, pursuant to State BARCT requirements, Rule 69.3.1 was originally adopted to supplement Rule 69.3. Rule 69.3.1 was amended on February 24, 2010, to reduce high daily NOx emissions from certain older existing turbines that generate electrical power during periods of peak electrical demand. Rules 69.3 and 69.3.1 are subject to the RACT requirements of CAA §182(f), because there are gas turbine engines at major NOx sources.

The District compared both rules to those of other California air districts, including SJVAPCD Rule 4703 (Stationary Gas Turbines, September 20, 2007) and BAAQMD Rule 9-9 (Nitrogen Oxides from Stationary Gas Turbines, December 6, 2006). However, because existing Rule 69.3.1 was not originally written to be submitted for SIP approval, revisions are now necessary to ensure the rule satisfies RACT and other federal requirements. These include clarification on the applicability interplay between Rule 69.3 and 69.3.1. In future rulemaking, the District envisions incorporating all requirements found in Rule 69.3 into a revised Rule 69.3.1, rendering Rule 69.3 duplicative and subject to repeal from the SIP. Upon adoption, revised Rule 69.3.1 would cover the entire source category. Additionally, various rule definitions found in both rules would be further clarified to remove ambiguity. These potentially include, but are not be limited to, revised definitions for extended startups, period of operation at low load, and references to nonoperation of peaking units on predicted days of high ozone concentrations.

The proposed amendment to Rule 69.3.1 is not anticipated to result in significant emission reductions. Thus, it is evident that the proposed amendment will not assist in demonstrating attainment of either the 2008 or 2015 eight-hour ozone standards, subsequent to this RACT Demonstration. The September 23, 2019 reclassification notice for San Diego County for the 2008 ozone standard stipulated that in such situations, states and air districts can adopt/submit RACT measures not necessary for attainment "18 months from the effective date of the final

<sup>&</sup>lt;sup>69</sup> 62 FR 32691

action" (i.e. March 23, 2021).<sup>70</sup> The District's proposed schedule for amending Rule 69.3.1 is in line with these required deadlines. Consequently, provided Rule 69.3.1 is amended by March 23, 2021, and submitted to the EPA (through CARB) shortly thereafter, the District determines that the proposed amended Rule 69.3.1 will fully satisfy RACT requirement for the 2008 and 2015 eight-hour ozone standards. The District will continue to work with the EPA to address potential deficiencies relating to SIP approval and demonstrating RACT throughout the rulemaking process.

#### 2.2.8 Rules 69.4 and Rule 69.4.1

District Rule 69.4 (Stationary Reciprocating Internal Combustion Engines – Reasonably Available Control Technology, July 30, 2003) and Rule 69.4.1 (Stationary Reciprocating Internal Combustion Engines, November 15, 2000) regulate NOx emissions from stationary reciprocating internal combustion engines. Rule 69.4 was originally approved into the SIP on January 4, 2006.<sup>71</sup> State law requires implementation of BARCT; therefore, Rule 69.4.1 was initially adopted on November 15, 2000, to supplement Rule 69.4. At present time, both Rules 69.4 and 69.4.1 are subject to the RACT requirements of CAA §182(f), because there are reciprocating internal combustion engines at major NOx sources.<sup>72</sup>

For all new engines subject to each rule, federal RACT level of control for spark-ignition engines is already achieved through BACT requirements under State law through the District's NSR rules, and the State Air Toxic Control Measures (ATCM) requirements for compression-ignition engines. BACT for new engines, under the District's NSR rules, is considered to be as stringent as the required federal RACT level of control. The federal requirement for new engines to meet BACT is now federally enforceable upon EPA's SIP conditional approval of the District's recently revised NSR rules, effective November 5, 2018.<sup>73</sup> Consequently, the District believes that all new engines in the source category now meet RACT requirements through the District's existing rules.

To further evaluate RACT for new and existing engines, Rule 69.4.1 was compared to SJVAPCD Rule 4702 (Internal Combustion Engines, November 14, 2013). SJVAPCD Rule 4702 requires all non-emergency stationary compression-ignition engines to meet a Tier 4

<sup>&</sup>lt;sup>70</sup> 84 FR 44238

<sup>&</sup>lt;sup>71</sup> 71 FR 244

<sup>&</sup>lt;sup>72</sup> There are no current major agricultural sources in San Diego County. Thus, both Rules 69.4 and 69.4.1 do not require modification to cover small agricultural sources (i.e. under 12.5 tons of NOx or VOC) for RACT purposes. However, one agricultural source in San Diego County may become a major source within the next five years if current growth trends continue. To ensure the facility complies with federal RACT requirements, amended Rule 69.4.1 include specific language for new or replacement rich and lean-burn engines exclusively used in agricultural operations. As worded, the proposed requirements would only apply to the one agricultural facility noted, but also to additional agricultural facilities should they become major sources in the future.

<sup>73 83</sup> FR 50007

engine standard, currently the cleanest available technology for compression-ignition equipment. The District had previously been implementing these lower standards through enforcement of the State Diesel Engine ATCM and federal NSPS IIII. However, to ensure federal enforceability, the District amended Rule 69.4.1 on July 8, 2020, to mirror the requirements of the Diesel Engine ATCM, recently amended NSPS IIII, as well as SJVAPCD Rule 4702. Amended Rule 69.4.1 applies to both new and replacement stationary engines. The District also incorporated applicable requirements found in Rule 69.4 into the amended Rule 69.4.1, to have one District rule regulating the source category and fulfilling State and federal requirements. This will render Rule 69.4 duplicative and no longer necessary. As such, Rule 69.4 will be repealed immediately upon the effective date of EPA approving amended Rule 69.4.1 into the SIP.



Since amended Rule 69.4.1 matches control levels found in comparable rules at SJVAPCD, as well as other State and federal guidance, the District determines that amended Rule 69.4.1 represents RACT for the source category. Consequently, amended Rule 69.4.1 is being submitted with this RACT SIP submittal to replace Rule 69.4 as RACT for the 2008 and 2015 eight-hour ozone standards. The District requests that Rule 69.4 be redacted from the SIP upon EPA approval of amended Rule 69.4.1 into the SIP.

#### 2.2.9 Rule 69.5.1

The District adopted Rule 69.5.1 (Natural Gas-Fired Water Heaters, June 24, 2015), to replace former Rule 69.5 which was repealed on July 1, 2016. Rule 69.5.1 applies to new residential-type water heaters operated with natural gas and with a rated heat input capacity of less than 75,000 BTU/hour. The rule limits emissions to 10 nanograms per Joule (ng/J) of heat output. To evaluate RACT, the District compared Rule 69.5.1 to SCAQMD's Rule 1121 (Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters, last amended

September 3, 2004). Rule 1121 requires most new water heaters sold in the South Coast region to also meet a 10 ng/J NOx limit, which aligns with Rule 69.5.1. Nonetheless, Rule 69.5.1 is not subject to the RACT requirements of CAA §182(f), because natural gas-fired water heaters are considered area sources, not major NOx sources. Additionally, there is no CTG applicable to the sources covered by Rule 69.5.1, and no known major sources exist in the County. Consequently, Rule 69.5.1 is not being submitted with this RACT SIP submittal.

#### 2.2.10 Rule 69.6

District Rule 69.6 (Natural Gas-Fired, Fan-Type Central Furnaces, June 17, 1998) regulates NOx emissions from natural gas-fired, fan-type central furnaces. Rule 69.6 is not subject to the RACT requirements of CAA §182(f), because the subject sources are considered area sources, not major NOx sources. Accordingly, Rule 69.6 is not being submitted with this RACT SIP submittal.

#### 2.2.11 Major Source Landfill Flare Control Measure (Rule Number TBD)

As noted in Section 2.1.1, the District determined that each of the four landfill facilities subject to District Rules 59 and 59.1 also operate flares consuming landfill gas emitting NOx emissions over the 12.5 ton annual threshold to be considered a major source of NOx for RACT purposes. Consequently, the District must evaluate RACT from such operations. EPA has not issued a CTG for flaring operations.

Flares serve two basic functions: as an emission control device and as a safety device during unforeseeable and unpreventable emergency situations. Flaring is a high temperature oxidation process used to burn mostly hydrocarbons of waste gases from industrial or landfill operations. Operators typically consider alternatives to flaring because it is generally costly, and therefore avoided whenever possible. In addition,



Flares produce NOx emissions, but they are also critical safety devices in an emergency

unreasonable restrictions on flaring operations can potentially result in catastrophic consequences, which can lead to explosions resulting is loss of property, injury, and potentially loss of human life.

In San Diego County, flares at landfills and sewage treatment plants combine to emit approximately 108 tons of NOx per year, but about two-thirds of those emissions emanate

from landfill sources.<sup>74</sup> Several air districts in California have regulated oil and gas production and refinery flare rules for over two decades. Examples include SCAQMD Rule 1118 (Control of Emissions from Refinery Flares, July 7, 2017), SJVAPCD Rule 4311 (Flares, June 18, 2009),<sup>75</sup> and Santa Barbara County APCD Rule 359 (Flares and Thermal Oxidizers, June 28, 1994). San Diego County does not have any active oil/gas/refinery operations; thus, a flare rule covering such operations has been, and still is, unwarranted.

In January 2019, South Coast AQMD adopted a non-refinery NOx flare rule (Rule 1118.1 – Control of Emissions from Non-Refinery Flares, January 4, 2019). Flares subject to Rule 1118.1 include flares that consume produced gas, digester gas, and landfill gas.<sup>76</sup> BAAQMD is also considering a non-refinery flare rule, as enumerated in recent air quality plans.<sup>77</sup> Both Rule 1118.1, and the proposed BAAQMD measure, endeavor controlling non-refinery flare NOx emissions at an "ultra-low" level of 0.025 lbm/MMBtu, where feasible and cost-effective.<sup>78</sup> The cost-effectiveness of adopting ultra-low NOx technology for these rules was evaluated using a baseline RACT level of control of 0.06 lbm/MMBtu, based on a 2017 BAAQMD determined RACT level of control for enclosed landfill gas flares equal to 0.06 lbm/MMBtu.<sup>79</sup> A preliminary analysis of flare technology in place at landfill Facilities A, B, C, and D (as

- <sup>78</sup> SCAQMD Rule 1118.1 controls NOx at the "ultra-low" NOx level (0.025 lbm/MMBtu) for all categories, except flares consuming digester gas at non-major sources and flares that consume non-digester/landfill/produced gas (0.06 lbm/MMBtu). Flares consuming produced gas have a lower NOx limit of 0.018 lbm/MMBtu. SCAQMD staff determined further controls for these specific categories would not be cost-effective for adoption.
- <sup>79</sup> "Spare The Air Cool the Climate. A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan." Volume 2 – Stationary Source Sector. Stationary Source Control Measure #SS23. Adopted April 19, 2017.

<sup>&</sup>lt;sup>74</sup> The largest wastewater treatment facility in San Diego County operates three flares that consume digester gas. Combined, these three flares have emitted no more than 10 tons of NOx per year since 2014, demonstrating a pattern of operational consistency under the threshold of 12.5 tons of NOx per year to be considered a major source of NOx for RACT purposes. Consequently, the District has not included digester-gas consuming flares within this RACT analysis.

<sup>&</sup>lt;sup>75</sup> SJVAPCD Rule 4311 exempts flares found at municipal solid waste landfills subject to SJVAPCD Rule 4642 (Solid Waste Disposal Sites), flares subject to 40 CFR 60 Subparts WWW or Cc, and/or flares found at stationary sources with a PTE of less than ten tons of VOC and NOx per year. Thus, should the District adopt a flare rule in the future to control NOx at any control level from landfills, it would be considered more stringent than what SJVAPCD currently allows.

<sup>&</sup>lt;sup>76</sup> South Coast AQMD Rule 1118.1 sets an "ultra-low" NOx emission limit of 0.025 lbm/MMBtu for most new or replaced flares, as well as capacity thresholds for existing flares. The staff report indicated that the cost-effectiveness of controlling landfill gas flare at this level ranged between \$48,000 and \$50,000 depending on the capacity threshold evaluated (see Table 7 in Staff Report).

<sup>&</sup>lt;sup>77</sup> "Spare The Air – Cool the Climate. A Blueprint for Clean Air and Climate Protection in the Bay Area. Final 2017 Clean Air Plan." Stationary Source Control Measure #SS23. Adopted April 19, 2017.

referenced in Section 2.1.1), indicate all already comply at 0.06 lbm/MMBtu. Consequently, the District presumes that adoption of a local rule to control NOx emissions at RACT levels for these facilities may already be cost-effective and may not impact current operations.

If so, a potential flare rule controlling emissions at the 0.06 lbm/MMBtu control level may not result in "true" emission reductions at those facilities but would prevent facilities from unnecessarily removing NOx controls. The District does not currently have a local rule establishing NOx emission limits for non-refinery flares, though some flare operational standards are found within other District rules. All flares identified in this RACT analysis are already subject to federal regulation.<sup>80</sup> This regulation is not currently federally enforceable in the SIP for RACT purposes in San Diego County. To ensure that the applicable regulation is federally enforceable, and to ensure RACT is fully demonstrated, the District commits to evaluating and (if warranted) adopting a District Landfill Major Source Flare Rule (Rule Number TBD), and submitting it to the EPA (through CARB) for inclusion in the SIP no later than March 23, 2021.<sup>81</sup> The proposed rule would incorporate applicable flare requirements found in Subpart A (General Provisions) 40 CFR 60.18 (General Control Device and Work Practice Requirements) as needed, and mandate a cost-effective NOx control level that is on par with NOx control levels found in other California air districts (i.e. between 0.06 and 0.025 lbm/MMBtu).

At the time the proposed measure is considered/adopted, it will be submitted into the SIP to comply with RACT requirements for the 2008 and 2015 eight-hour ozone standards. Consequently, the District determines that the adoption and submittal of the proposed major source landfill flare rule will represent RACT for the 2008 and 2015 eight-hour ozone standards.

<sup>&</sup>lt;sup>80</sup> 40 CFR 60.18

<sup>&</sup>lt;sup>81</sup> The September 23, 2019, reclassification notice for San Diego County for the 2008 eighthour ozone NAAQS allows RACT measures not necessary for attainment to be adopted/submitted within 18 months from the effective date of final action (i.e. March 23, 2021), with full implementation by July 20, 2021. No emission reductions are anticipated from a local flare rule with current RACT levels of control. Thus, the measure is not necessary or needed for attainment purposes, and the March 23, 2021, submittal deadline is justified.

# ATTACHMENT A – Source Categories, CTG/ACT List, and Applicable District Rules

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
COATINGS AN	D SOL	VENTS			l		
Aerospace Manufacturing and Rework Operations & Coating Operations	CTG	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 1997/12). See also Aerospace MACT (59 FR-29216 6/06/94, 1994/06).	Applies to aerospace coatings & cleaning solvents used at aerospace manufacturing & rework operations including contractors and subcontractors. Supersedes applicable parts of the Misc. Metal Part and Products CTG. Does not apply to manufacturing or rework operations involving space vehicles; rework operations performed on antique aerospace vehicles or components; or R&D, quality control, laboratory testing, and electronic parts and assemblies (except cleaning and coating of completed assemblies).	67.9 – Aerospace Coating Operations	8/17/1998, 63 FR 43884	4/30/1997	No sources with aerospace emissions greater than the CTG applicability threshold of 25 tons of VOC per year.

	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Cans and Coils, Surface Coating of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 1977/05)	sheet basecoat and over varnish, two- piece can exterior basecoat and over	67.4 - Metal Container, Metal Closure and Metal Coil Coating Operations	9/20/2012, 77 FR 58313		Previously Approved Rule Reaffirmed as RACT
Graphic Arts	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography (EPA- 450/2-78-033, 1978/12)	the flexographic and rotogravure printing processes as applied	Graphic Arts Operations	9/20/2012, 77 FR 58313		Previously Approved Rule Reaffirmed as RACT
	CTG	Control Techniques Guidelines for Flexible Packaging Printing (EPA-453/R-06-003, 2006/09)	Applies to flexible packaging printing operations that emit at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	67.16 – Graphic Arts Operations	9/20/2012, 77 FR 58313		Previously Approved Rule Reaffirmed as RACT

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule		Date Last Revised	Comments
Graphic Arts (cont.)	CTG		Applies to graphic arts operations that use the offset lithographic printing or letterpress printing process.	67.16 – Graphic Arts Operations	9/20/2012, 77 FR 58313	11/9/2011	Previously Approved Rule Reaffirmed as RACT
	ACT	Offset Lithography Printing (EPA-453/R- 94-054, 1994/06)	Applies to graphic arts operations that use the offset lithographic printing process.	67.16 – Graphic Arts Operations	9/20/2012, 77 FR 58313	11/9/2011	Previously Approved Rule Reaffirmed as RACT
Magnet Wire, Coating of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire (EPA- 450/2-77-033, 1977/12)	Applies to wire coating curing ovens.	N/A	N/A	N/A	No Sources
Metal Furniture, Surface Coating of	CTG	Stationary Sources,	Applies to surface coating of metal furniture by metal furniture manufacturers.	N/A	N/A	N/A	No Sources

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule		Date Last Revised	Comments
Metal Furniture, Surface Coating of (cont.)	CTG	Metal Furniture Coatings (EPA-453/R- 07-005, 2007/09)	Applies to metal surface coating units at facilities where the total actual VOC emissions from all metal furniture coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	N/A	N/A	N/A	No Sources
Metal Parts and Products, Surface Coating of Miscellaneous	CTG	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)	Applies to industries that are not covered by specific CTG documents (Specific CTGs have been published for can, coil, automobile and light duty truck, metal furniture, magnet wire, and large appliances.)	67.3 - Metal Parts and Products Coating Operations	11/14/2003, 68 FR 64538	4/9/2003	Previously Approved Rule Reaffirmed as RACT

	Reference Document	Applicability	SDAPCD Rule		Date Last Revised	Comments
Metal Parts and Products, Surface Coating of Miscellaneous (cont.)	and Plastic Parts Coatings (EPA-453/R- 08-003, 2008/09)	Applies to industries that are not covered by specific CTG documents where the total actual VOC emissions from all metal and/or plastic parts coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	67.3 - Metal Parts and Products Coating Operations	11/14/2003, 68 FR 64538	4/9/2003	Previously Approved Rule Reaffirmed as RACT
			66.1 - Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds	8/09/2012, 77 FR 47536		No major sources. Amended rule not being submitted into SIP. CTG requirements addressed through Rules 67.3 and 67.18 as applicable.

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Paper and Fabric, Surface Coating of	CTG	Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics,	coating, applies to all coatings put on paper, fabric, or plastic film, and includes	Film and Fabric Coating Operations	3/27/1997, 62 FR 14639	5/15/1996	No sources with coating line emissions greater than the CTG applicability threshold of 25 tons of VOC per year per coating line.
	CTG	Coatings (EPA-453/R- 07-003, 2007/09)	surface coatings,	Film and Fabric Coating	3/27/1997, 62 FR 14639	5/15/1996	No sources with coating line emissions greater than the CTG applicability threshold of 25 tons of VOC per year per coating line.

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Shipbuilding	CTG	Surface Coating Operations at Shipbuilding and Ship Repair Facilities (EPA- 453/R-94-032, 1994/04)	or fresh-water metal hulled vessel used for	67.18 – Marine Coating Operations	3/27/1997, 62 FR 14639	5/15/1996	Previously Approved Rule Reaffirmed as RACT
	CTG	Miscellaneous Metal and Plastic Parts Coatings, (EPA-453/R- 08-003, 2008/09) (For Pleasure Boats)	or fresh-water metal	67.18 – Marine Coating Operations	3/27/1997, 62 FR 14639	5/15/1996	No sources applicable to CTG for pleasure-craft operations

Source CTG Category ACT	/ Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Shipbuilding N/A (cont.)	A Shipbuilding and Ship Repair Operations (Surface Coating) (61 FR 44050 8/27/96, 1996/08)		0	3/27/1997, 62 FR 14639	5/15/1996	Previously Approved Rule Reaffirmed as RACT

	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Solvent Metal Cleaning	from Solvent Metal	cleaners, open top vapor degreasers, and conveyorized		10/13/2009, 74 FR 52427		Proposed amended Rule Being Submitted upon adoption
				10/13/2009, 74 FR 52427		Previously Approved Rule Reaffirmed as RACT

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Solvent Metal Cleaning (cont.)	CTG	Control of Industrial Cleaning Solvents (EPA-453/R-06-001, 2006/09)	Applies to industrial cleaning with organic solvents.		8/09/2012, 77 FR 47536	5/11/2016	No major sources applicable to Rule 66.1. Amended rule not being submitted into SIP.
			67.6.1 – Cold Solvent Cleaning and Stripping Operations	10/13/2009, 74 FR 52427	5/23/2007	Proposed amended Rule Being Submitted upon adoption	
				67.6.2 – Vapor Degreasing Operations	10/13/2009, 74 FR 52427	5/23/2007	Previously Approved Rule Reaffirmed as RACT
	ACT	Halogenated Solvent Cleaners (EPA-450/3- 89-030, 1989/08)	Applies to cleaning machines that use halogenated solvents.	67.6.2 – Vapor Degreasing Operations	10/13/2009, 74 FR 52427	5/23/2007	Previously approved rule reaffirmed as RACT

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Solvent Metal Cleaning (cont.)	ACT	Industrial Cleaning Solvents (EPA-453/R- 94-015, 1994/02)	Applies to industrial cleaning with organic solvents.	66.1 – Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds	8/09/2012, 77 FR 47536	5/11/2016	No major sources applicable to Rule 66.1. Amended rule not being submitted into SIP.
				67.6.1 – Cold Solvent Cleaning and Stripping Operations	10/13/2009, 74 FR 52427	5/23/2007	Proposed amended Rule Being Submitted upon adoption
				67.6.2 – Vapor Degreasing Operations	10/13/2009, 74 FR 52427	5/23/2007	Previously Approved Rule Reaffirmed as RACT
Traffic Markings	ACT	Reduction of VOC Emissions from the Application of Traffic Markings (EPA-450/3- 88-007, 1988/08)	Applies to application of highway traffic markings.	67.0.1 - Architectural Coatings	10/04/2016, 81 FR 68320	6/24/2015	Rule approved into SIP but not subject to RACT

	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Wood Furniture Manufacturing		Control of VOC Emissions from Wood Furniture Manufacturing Operations (EPA- 453/R-96-007, 1996/04); 61 FR 25223, May 20, 1996; 61 FR 50823, September 27, 1996.	Applies to any facility that finishes wood furniture or performs cleaning or wash-off associated with wood furniture finishing operations.	67.11 - Wood Products Coating Operations	4/11/2013, 78 FR 21538	6/27/2012	Previously Approved Rule Reaffirmed as RACT
Flat Wood Paneling, Surface Coating of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface Coating of Flat Wood Paneling (EPA- 450/2-78-032, 1978/06), Control Techniques Guidelines for Flat Wood Paneling Coatings (EPA-453/R- 06-004, 2006/09)		N/A	N/A	N/A	No Sources

		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
PETROLEUM				•	•		•
Bulk Gasoline Plants	CTG	Organic Emissions from Bulk Gasoline	Applies to bulk plants with daily throughputs of 76,000 liters (20,077 gal.) gasoline or less.	61.1 – Receiving and Storing Volatile Organic Compounds at Bulk Plants and Bulk Terminals	8/08/1995, 60 FR 40285	1/10/1995	Previously Approved Rule Reaffirmed as RACT
External Floating Roof Tanks, Petroleum Liquid Storage in	CTG	Organic Emissions from Petroleum Liquid	Applies to external floating roof tanks larger than 150,000 liters (~40,000 gal. or 950 bbls.) storing petroleum liquids.	61.1 – Receiving and Storing Volatile Organic Compounds at Bulk Plants and Bulk Terminals	8/08/1995, 60 FR 40285	1/10/1995	Previously Approved Rule Reaffirmed as RACT
	ACT	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453/R-94-001, 1994/01)		67.17 - Storage of Materials Containing Volatile Organic Compounds	3/27/1997, 62 FR 14639	5/15/1996	Previously Approved Rule Reaffirmed as RACT

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Fixed Roof Tanks, Storage of Petroleum Liquids in	CTG	Organic Emissions from Storage of	Applies to storage vessels with capacities greater than 150,000 liters containing petroleum liquids with a true vapor pressure greater than 10.5 KPa. Exempts fixed roof tanks with capacities less than 1,600,000 liters used to store produced crude or condensate prior to lease custody transfer.	Storing Volatile Organic Compounds at Bulk Plants and Bulk Terminals	8/08/1995, 60 FR 40285	1/10/1995	Previously Approved Rule Reaffirmed as RACT
	ACT	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA- 453/R-94-001, 1994/01)		67.17 - Storage of Materials Containing Volatile Organic Compounds	3/27/1997, 62 FR 14639	5/15/1996	Previously Approved Rule Reaffirmed as RACT

	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Natural C Gas/Gasoline Processing Plants, Equipment Leaks from	Processing Plants (EPA-450/3-83-007, 1983/12)		N/A	N/A	N/A	No Sources

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Gasoline Dispensing Stage II Vapor Recovery	N/A	Stage II Gasoline Dispensing Facilities (EPA-450/3-91-022a, 1991/12)	Applies to gasoline dispensing into motor vehicles at gasoline dispensing facilities.	61.4 - Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks	1/07/2013, 78 FR 898	3/26/2008	Previously Approved Rule Reaffirmed as RACT
				61.4.1 - Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicle Fuel Tanks	N/A	3/26/2008	Rule addresses State requirements. Not being submitted into SIP.
Gasoline Service Stations	CTG	Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations (EPA- 450/R-75-102, 1975/11)	Applies to filling of gasoline storage tanks from gasoline tanker trucks.	61.3 – Transfer of Volatile Organic Compounds into Stationary Storage Tanks	6/30/1993, 58 FR 34906	10/16/1990	Previously Approved Rule Reaffirmed as RACT
				61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks	Pending	2/24/2010	Supplementary Rule Being Submitted

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Organic Liquid Storage	ACT		tanks in all industries, but primarily in petroleum refineries, pipelines, chemical	Containing Volatile Organic	3/27/1997, 62 FR 14639	5/15/1996	Previously Approved Rule Reaffirmed as RACT
Petroleum Refinery Equipment, Leaks from	CTG	Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 1978/06)	Applies to leaks from equipment such as pumps, compressors, flanges, valves, and pressure relief devices.	N/A	N/A	N/A	No Sources
Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	CTG		Applies to non- condensables from vacuum producing systems, wastewater separators, and all pressurized process units.	N/A	N/A	N/A	No Sources

	-	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Synthetic Organic Chemical and Polymer Manufacturing Equipment, Equipment Leaks from		Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA- 450/3-83-006, 1984/03)	. ,	N/A	N/A	N/A	No Sources
		Emissions from Air Oxidation Processes in Synthetic Organic	chemical manufacturing	N/A	N/A	N/A	No Sources

	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Synthetic Organic Chemical and Polymer Manufacturing Equipment, Equipment Leaks from (cont.)	CTG	SOCMI Distillation and Reactor Processes (EPA-450/4-91-031, 1993/08)	Applies to reactor processes that chemically change feed stocks into products or intermediate chemicals and distillation processes used to separate chemicals in the synthetic organic chemical manufacturing industry.	N/A	N/A	N/A	No Sources
	CTG	Control of VOC Emissions from Manufacture of High - Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 1983/11)	Applies to the manufacturing of high- density polyethylene, polypropylene, and polystyrene.	N/A	N/A	N/A	No Sources

Source Category		Reference Document	Applicability	SDAPCD Rule		Date Last Revised	Comments
Tank Trucks, Gasoline Loading Terminals	CTG	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 1977/10)		61.2 – Transfer of Organic Compounds into Mobile Transport Tanks	8/26/2003, 68 FR 51186	7/26/2000	Proposed amended Rule Being Submitted upon adoption
Tank Trucks, Gasoline and Vapor Collection Systems	CTG	Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 1978/12)		Compounds	8/26/2003, 68 FR 51186	7/26/2000	Proposed amended Rule Being Submitted upon adoption

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Oil and Natural Gas Industry	CTG	16-001, 81 FR 74798, 2016/10)	Applies to storage tanks, pneumatic controllers, pneumatic pumps, centrifugal and reciprocating compressors, equipment leaks from natural gas processing plants, and fugitive emissions from equipment leaks.		N/A	N/A	No sources <sup>82</sup>
STATIONARY	SOUR	CE NOx					
Electric Utility Boilers	ACT	NOx Emissions from Utility Boilers (EPA- 453/R-94-023, 1994/03)	utility boilers.	69 - Electrical Generating Steam Boilers, Replacement Units, and New Units	N/A		Rule reaffirmed as RACT. Rule not being submitted. All sources not applicable to rule as of 1/1/2019.

<sup>&</sup>lt;sup>82</sup> CARB Staff Report "Proposed Submission of CA Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities into CA SIP." September 21, 2018.

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Industrial Commercial Boilers	ACT	NOx Emissions from Industrial Commercial & Institutional Boilers (EPA-453/R-94-022, 1994/03)	Applies to boilers used in industrial facilities.		2/09/1996, 61 FR 4887	9/27/1994	Previously Approved Rule Reaffirmed as RACT
				Boilers,	N/A Pending	3/25/2009 7/8/2020	Amended Rule Being Submitted
				69.2.2 - Medium Boilers, Process Heaters, and Steam Generators	Pending	7/8/2020	New Rule Being Submitted

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Process ACT Heaters	ACT	NOx Emissions from Process Heaters (EPA- 453/R-93-034, revised 1993/09)		69.2 - Industrial and Commercial Boilers, Process Heaters and Steam Generators	2/09/1996, 61 FR 4887	9/27/1994	Previously Approved Rule Reaffirmed as RACT
				69.2.1 - Small Boilers, Process Heaters, and Steam Generators	N/A Pending	3/25/2009 7/8/2020	Amended Rule Being Submitted
				69.2.2 - Medium Boilers, Process Heaters, and Steam Generators	Pending	7/8/2020	New Rule Being Submitted

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Stationary Gas Turbines	ACT	NOx Emissions from Stationary Combustion Turbines (EPA-453/R- 93-007, 1993/01)	Applies to stationary gas turbines used in various applications and operations.	69.3 - Stationary Gas Turbines Engines - Reasonable available Control Technology	6/17/1997, 62 FR 32691		Previously Approved Rule. To be Repealed upon EPA SIP approval of proposed amended Rule 69.3.1
				69.3.1 - Stationary Gas Turbines Engines - Best Available Retrofit Control Technology	Pending	for amendment	Proposed Amended Rule Being Submitted upon adoption
Stationary Reciprocating Internal Combustion (IC) Engines	ACT	NOx Emissions from Stationary IC Engines (EPA-453/R- 93-032, 1993/07, updated September 2000)	Applies to stationary reciprocating internal combustion engines.	69.4 - Stationary Reciprocating Internal Combustion Engines - RACT	1/04/2006, 71 FR 244		Previously Approved Rule Reaffirmed as RACT. To be Repealed upon EPA SIP approval of amended Rule 69.4.1

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Stationary Reciprocating Internal Combustion (IC) Engines (cont.)				Stationary	N/A Pending	11/15/2000 7/8/2020	Amended Rule Being Submitted. Replaces Rule 69.4 upon EPA SIP approval
OTHER				•			
Cutback Asphalt		Use of Cutback	Applies to use of cutback asphalt used for roadway paving.	67.7 - Cutback and Emulsified Asphalts		5/15/1996	Previously Approved Rule Reaffirmed as RACT
Ethylene Oxide - Sterilization and Aeration		Sterilization/Fumigation Operations (EPA- 450/3-89-007, 1989/03)	Applies to ethylene oxide used as a sterilant/ fumigant in production of medical equipment supplies, in miscellaneous sterilization and fumigation operations, and at hospitals.	Ethylene Oxide Sterilizers and Aerators	N/A	N/A	No Major Sources

Source Category	CTG/ ACT	Reference Document	Applicability	SDAPCD Rule		Date Last Revised	Comments
Industrial Adhesives	CTG	Control Techniques Guidelines for Miscellaneous Industrial Adhesives (EPA-453/R-08-005)	miscellaneous industrial adhesive	67.21 - Adhesive Materials Application Operations	3/26/2020, 85 FR 10611	5/14/2008	Rule affirmed as RACT
Large Appliances Coating	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances (EPA- 450/2-77-034, 1977/12),	Applies to the coating of large appliances, such as doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and similar products.	N/A	N/A	N/A	No Sources

Source Category		Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Large Appliances Coating (cont.)	CTG	Guidelines for Large Appliance Coatings (EPA-453/R-07-004, 2007/09)	Applies to the coating of large appliances, such as doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and similar products.	N/A	N/A	N/A	No Sources
Rubber Tires Manufacturing		Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-	Applies to manufacturing processes; undertread cementing, tread-end cementing, bead dipping, and green tire spraying.	N/A	N/A	N/A	No Sources

Source Category	Reference Document	Applicability	SDAPCD Rule	SIP Approval Date, Citation	Date Last Revised	Comments
Fiberglass Boat Manufacturing	Fiberglass Boat Manufacturing Materials (EPA-453/R- 08-004, 2008/09)	that manufacture hulls or decks of boats from fiberglass, or build	Resin Operations	5/02/2018, 83 FR 13869	5/11/2016	No Sources applicable to CTG. Previously approved Rule reaffirmed as RACT

# ATTACHMENT B – CTG/ACT Categories with No Subject District Sources ("Negative Declaration" or ND)

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
COATINGS AND	D SOL						
Aerospace Manufacturing and Rework Operations & Coating Operations	CTG	Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 1997/12). See also Aerospace	Applies to aerospace coatings and cleaning solvents used at aerospace manufacturing and rework operations including contractors and subcontractors. Supersedes the applicable parts of the Miscellaneous Metal Part and Products CTG. Does not apply to manufacturing or rework operations involving space vehicles; rework operations performed on antique aerospace vehicles or components; or research and development, quality control, laboratory testing, and electronic parts and assemblies (except for cleaning and coating of completed assemblies).		No sources with emissions greater than the CTG applicability threshold of 25 tons VOC per year.	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
Automobile Refinishing	ACT	Reduction of Volatile Organic Compound Emissions from Automobile Body Refinishing (EPA- 453/R-94-031, 1994/04).	Applies to automobile refinishing operations.	Yes	No major sources	Yes	Yes
	АСТ	Automobile Refinishing (EPA-450/3-88-009, 1988/10).					
Automobile and Light-duty Trucks, Surface Coating of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics,	For automobile & light truck coating, applies to all objects surface coated in automotive and light duty truck assembly plants. Does not apply to customizers, body shops or other repainters.	No	N/A	Yes	Yes
	CTG	Control Techniques Guidelines for Automobile and Light- Duty Truck Assembly Coatings (EPA-453/R- 08-006, 2008/09)		No	N/A	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?			Submitting ND for 2020 RACT SIP ( <i>Severe</i> )?
Fabric, Surface Coating of	CTG	Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and	For fabric coating, applies to all types of coatings applied to fabric and any decorative or protective topcoat applied over vinyl coated fabric or vinyl sheets. Does not apply to the application of vinyl plastisol to the fabric.		No sources with coating line emissions greater than the CTG applicability threshold of 25 tons of VOC per year per coating line.	Yes	Yes
Fiberglass Boat Manufacturing Materials	CTG	Guidelines for Fiberglass Boat Manufacturing Materials (EPA-453/R-	Applies to the use of gel coats, resins, and materials used to clean application equipment in fiberglass boat manufacturing operations.		No sources in District with emissions exceeding CTG applicability threshold.	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
Flat Wood Paneling, Surface Coating of	CTG				N/A N/A	Yes	Yes
Ink and Paint Manufacturing	N/A	Control of VOC from Ink and Paint Manufacturing (EPA- 450/3-92-013, 1992/04)	Applies to products of the paint manufacturing industry, including architectural coatings, product coating for original equipment manufacturers, and special-purpose coatings. Also applies to ink manufacturing, including letterpress inks, lithographic and offset inks, gravure inks, and flexographic inks.		No major sources; all sources emit under CTG applicability threshold.	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?		<b>U</b>	Submitting ND for 2020 RACT SIP ( <i>Severe</i> )?
Large Appliances, Surface Coating of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances (EPA-450/2-77-034, 1977/12), Control Techniques Guidelines for Large Appliance Coatings (EPA-453/R-07-004, 2007/09)	Applies to the coating of large appliances, such as doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and similar products.	No	N/A N/A	Yes	Yes
Magnet Wire, Surface Coating for Insulation of	CTG	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire (EPA-450/2-77-033, 1977/12)	Applies to wire coating curing ovens.	No	N/A	Yes	Yes

	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT	<b>—</b>	Submitting ND for 2020 RACT SIP (Severe)?
Metal Furniture Coatings	CTG	Organic Emissions	Applies to surface coating of metal furniture by metal furniture manufacturers.	No	N/A	Yes	Yes
	CTG	Guidelines for Metal Furniture Coatings (EPA-453/R-07-005, 2007/09)	Applies to metal surface coating units at facilities where the total actual VOC emissions from all metal furniture coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
Metal and Plastic Parts	3, 4, 5,	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (EPA-453/R- 08-003, 2008/09)	Applies to industries that are not covered by specific CTG documents where the total actual VOC emissions from coating operations involving plastic parts, automotive/transportation and business machine plastic parts, pleasure craft surface coating operations, and/or motor vehicle materials (including cleaning activities) are at least 6.8 kg/day (15 lbs/day) of VOC before consideration of controls.	Yes	No sources applicable to Tables 3, 4, 5, and 6 with emissions greater than the CTG applicability threshold of 15 lbs of VOC per day.		Yes
Paper, Film, and Foil Coatings	CTG	Film, and Foil Coatings	Applies to individual paper, film, and foil surface coating lines with the potential to emit at least 25 tons per year	Yes	No sources with emissions greater than the CTG applicability threshold of 25 tons VOC per year per coating line.	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
Paper, Film, and Foil Coatings (cont.)	CTG	from Existing	to all coatings put on paper and includes decorative coatings on metal foil such as gift wrap	Yes	No sources with coating line emissions greater than the CTG applicability threshold of 25 tons of VOC per year per coating line.	Yes	Yes
PETROLEUM							
Petroleum Refineries	ACT	Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 1992/12)	Applies to petroleum refineries.	No	N/A	Yes	Yes
	CTG	Vacuum Producing Systems, Wastewater Separators and	Applies to vacuum producing systems, wastewater separators and process unit turnarounds at refineries.	No	N/A	Yes	Yes

<mark>Source Category</mark> Petroleum Refineries (cont.)	CTG/ ACT CTG	Reference Document Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 1978/06)	Applicability	SDAPCD Sources? No	RACT		Submitting ND for 2020 RACT SIP (Severe)? Yes
Natural Gas / Gasoline Processing Plants	CTG	Control of VOC Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/3-83-007, 1983/12)	Applies to facilities engaged in the separation of natural gas liquids from field gas and/or fraction of the liquids into natural gas products, such as ethane, propane, butane and natural gasoline. It is not applicable to compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units and field gas gathering systems unless they are located at a gas plant.		N/A	Yes	Yes

	CTG/ ACT CTG	Reference Document		SDAPCD Sources? Yes			Submitting ND for 2020 RACT SIP (Severe)? Yes
Petroleum Dry Cleaners		Petroleum Dry Cleaners, (EPA-450/3-82-009,	solvent dry cleaning facilities that consume 123,000 liters or more of petroleum solvent per year.		consuming over the CTG applicability threshold of 123,000 liters per year		
Oil and Natural Gas Industry	CTG	Guidelines for the Oil and Natural Gas Industry (EPA-453/B- 16-001, 2016/10)	Applies to storage tanks, pneumatic controllers, pneumatic pumps, centrifugal and reciprocating compressors, equipment leaks from natural gas processing plants, & fugitive emissions from equipment leaks.	No	N/A	Yes	Yes
Other Major Non- CTG Stationary Sources		Various	Certification that there are no major non-CTG sources of VOC (over 25 tons per year) in the nonattainment area.	N/A	N/A	Yes	Yes

Category		Reference Document		SDAPCD Sources?	RACT		Submitting ND for 2020 RACT SIP (Severe)?
STATIONARY S	OURC	ENOx					
Cement Manufacturing	ACT	NOx Emissions from Cement Manufacturing (EPA-453/R-94-004, 1994/03, and update EPA-457/R-00-002, 2000/09)	Applies to the kilns used in cement manufacturing.	No	N/A	Yes	Yes
Glass Manufacturing	ACT	NOx Emissions from Glass Manufacturing (EPA-453/R-94-037, 1994/06)	Applies to glass manufacturing.	No	N/A	Yes	Yes
Iron and Steel	ACT	NOx Emissions from Iron and Steel (EPA- 453/R-94-065, 1994/9)	Applies to iron and steel manufacturing.	No	N/A	Yes	Yes
Nitric and Adipic Acid Manufacturing Plants	ACT	NOx Emissions from Nitric and Adipic Acid Manufacturing Plants (EPA-453/3-91-026, 1991/12)	Applies to nitric and adipic acid manufacturing operations.	No	N/A	Yes	Yes

<u> </u>	CTG/ ACT	Reference Document		SDAPCD Sources?			Submitting ND for 2020 RACT SIP (Severe)?
OTHER Agricultural Pesticides	ACT	Control of VOC from the Application of Agricultural Pesticides (EPA-453/R-92-011, 1993/3)	Applies to pesticides used for agricultural purposes.	Yes	Regulated by the State of California Department of Pesticide Regulation, Fugitive VOC Source	Yes	Yes
Ethylene Oxide - Sterilization and Aeration	ACT	Ethylene Oxide Sterilization (EPA- 450/3-89-007, 1989/03)	Applies to ethylene oxide used as a sterilant/fumigant in production of medical equipment supplies, in miscellaneous sterilization and fumigation operations, and at hospitals.	Yes	No major sources	Yes	Yes
Commercial Bakeries	ACT	Bakery Ovens Alternative Control Techniques (EPA- 453/R-92-017, 1992/12)	Applies to commercial bakery ovens that are used to produce bread or similar yeast leavened products. Does not apply to bakers that make non- yeast leavened products.	Yes	No major sources	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT Analysis		Submitting ND for 2020 RACT SIP ( <i>Severe</i> )?
Industrial Wastewater	ACT	CTG (Draft) (EPA-453/D-93-056, 1992/9). ACT (1994/4)	Applies to emissions from the collection and treatment of industrial wastewater from: the organic chemicals, plastics, and synthetic fibers industry; the pesticides manufacturing industry; the pharmaceuticals manufacturing industry; and the hazardous waste treatment, storage, and disposal facilities industry.	No	N/A	Yes	Yes
Leather Tanning and Finishing Operations	ACT		Applies to leather finishing operations.	No	N/A	Yes	Yes
Pharmaceutical Products	CTG		Applies to facilities and operations that synthesize pharmaceutical products.		No sources with emissions greater than the CTG applicability thresholds	Yes	Yes

	CTG/ ACT	Reference Document		SDAPCD Sources?			Submitting ND for 2020 RACT SIP (Severe)?
Plywood Veneer Dryers	CTG	Control Techniques for Organic Emissions from Plywood Veneer Dryers (EPA-450/3- 83-012, 1983/05)	Applies to softwood plywood manufacturing operations.	No	N/A	Yes	Yes
Pneumatic Rubber Tires, Manufacture of	CTG	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78- 030, 1978/12)	Applies to manufacturing processes; undertread cementing, tread-end cementing, bead dipping, and green tire spraying.	No	N/A	Yes	Yes
Synthetic Organic Chemical Manufacturing	CTG	Control of VOC Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, 1984/12)	processes used in the synthetic organic chemical manufacturing industry.	No	N/A	Yes	Yes
Synthetic Organic Chemical Manufacturing (cont.)	CTG	SOCMI Distillation and Reactor Processes (EPA-450/4-91-031, 1993/08)	Applies to reactor processes that chemically change feed stocks into products or intermediate chemicals and distillation processes used to separate chemicals in the synthetic organic chemical manufacturing industry.		N/A	Yes	Yes

Source Category	CTG/ ACT	Reference Document		SDAPCD Sources?	RACT Analysis		Submitting ND for 2020 RACT SIP (Severe)?
Synthetic Organic Chemical and Polymer Manufacturing Equipment, Equipment Leaks from	CTG	Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA- 450/3-83-006,	process fluids (gaseous or liquid) from plant		N/A	Yes	Yes
	CTG	Control of VOC Emissions from Manufacture of High - Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 1983/11)	Applies to the manufacturing of high- density polyethylene, polypropylene, and polystyrene.	No	N/A	Yes	Yes

# ATTACHMENT C – Non-CTG RACT Rules for Major Stationary Sources

APCD Rule Number	APCD Rule Name	SIP Submittal / Approval Status
67.10	Kelp Processing and Bio-Polymer Manufacturing Operations	Approved 06/22/1998, 63 FR 33854. Unique source that is no longer a major source of VOC.
67.19	Coatings and Printing Inks Manufacturing Operations	Approved 05/26/2000, 65 FR 34101
68	Fuel-Burning Equipment - Oxides of Nitrogen	Approved 04/09/1996, 61 FR 15719
69	Electrical Generating Steam Boilers, Replacement Units and New Units	Not being submitted. All sources are not applicable to the rule as of 1/1/2019
69.2	Industrial and Commercial Boilers, Process Heaters and Steam Generators	Approved 02/09/1996, 61 FR 4887
69.2.1	Small Boilers, Process Heaters, and Steam Generators	Amended 7/8/2020 and being submitted
69.2.2	Medium Boilers, Process Heaters, and Steam Generators	New rule adopted and being submitted
69.3	Stationary Gas Turbine Engines – Reasonably Available Control Technology	Approved 06/17/1997, 62 FR 32691. To be Repealed upon EPA approval of proposed amended Rule 69.3.1
69.3.1	Stationary Gas Turbine Engines – Best Available Retrofit Control Technology	Proposed Amended Rule Being Submitted upon adoption by March 23, 2021
69.4	Stationary Reciprocating Internal Combustion Engines – Reasonably Available Control Technology	Approved 01/04/2006, 71 FR 244. To be repealed upon EPA SIP approval of amended Rule 69.4.1
69.4.1	Stationary Reciprocating Internal Combustion Engines	Proposed amended rule being submitted upon adoption. To replace Rule 69.4 upon EPA SIP approval
TBD (proposed)	Major Source Landfill Flare Control Measure (Rule Number TBD)	Proposed new rule being submitted upon adoption by March 23, 2021

### ATTACHMENT D – Major Sources in San Diego County Subject to District Rules

	Facility Name	Facility Desc. (if applicable)	<b>VOC</b> (2018	3 (2018 San Diego County Major S								Source Facilities				
ID #			CARB)	District)	59	59.1	61.0	61.1	61.2	61.3	61.3.1	61.4	61.4.1			
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	-	-	-	-	-	-	-	-	-			
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-	X	X	-	-	-	-			
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-	-	-	-	-	-	-			
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	X	X	X	X	X	X	X			
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	X	-	-	X	X	X	X			
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	-	-	-	-	-	-			
6068	Toro Energy of California	Power Generation	1.7	25.4	-	-	-	-	-	-	-	-	-			
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	Х	Х	Х	Х	Х	Х	Х			
0935	Frazee Paint	Paint	20.8	20.9	-	-	-	-	-	-	-	-	-			
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	-	-	-	-	-	-	-			
0673	California Products	Signs	16.4	16.4	-	-	-	-	-	-	-	-	-			
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-	-	-	-	-	-	-			
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	Х	-	-	Х	Х	Х	Х			
0099	Rohr Industries. (Goodrich)	Aviation Parts	14.2	14.2	-	-	-	-	-	-	-	-	-			
6656	CA ST of Dept. of Corrections	Detention Facility	13.9	13.9	-	-	Х	-	Х	Х	Х	Х	Х			
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	Х	-	-	Х	Х	Х	Х			
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	Х	-	Х	Х	Х	Х			
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	Х	-	-	Х	Х	Х	Х			
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-	-	-	-	-	-	-			
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	Х	-	-	Х	Х	Х	Х			
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	-	-	-	-	-	-	-			

# <u>NOTES:</u>

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	Facility Name	Facility Desc. (if applicable)	<b>VOC</b> (2018	<b>VOC</b> (2018		n Die	ego C	ounty	Ma	jor So	Apply fource F	aciliti	
ID #			CARB)	District)	61.5	61.6	61.7	61.8	64	66.1	67.0.1	67.1	67.2
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	-	-	-	-	-	-	X	-	-
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	X	X	-	-	X	-	-
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-	-	-	-	-	-	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	X	X	-	-	-	-	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	X	X	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	-	-	-	X	-	-
6068	Toro Energy of California	Power Generation	1.7	25.4	-	-	-	-	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	-	Х	-	-	-	-	-
0935	Frazee Paint	Paint	20.8	20.9	-	-	-	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	-	-	-	-	-	-	-
0673	California Products	Signs	16.4	16.4	-	-	-	-	-	-	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-	-	-	-	Х	-	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-	Х	-	-	-	-	-
0099	Rohr Industries. (Goodrich)	Aviation Parts	14.2	14.2	-	-	-	-	-	-	-	-	-
6656	CA ST of Dept. of Corrections	Detention Facility	13.9	13.9	-	-	-	Х	-	-	-	-	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-	Х	-	-	-	-	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	Х	-	-	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-	Х	-	-	-	-	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-	-	-	-	-	-	-
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-	Х	-	-	-	-	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	-	-	-	-	-	-	-

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APCD		Facility Desc.	VOC	VOC						that Ap			
	Facility Name	(if applicable)	(2018	(2018			1			or Sour			1
ID #			CARB)	District)	67.3	67.4	67.5	67.6	67.6.1	67.6.2	67.7	67.9	67.10
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	X	-	-	-	-	-	-	-	-
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-	•	1	-	-	-	-
0221	USMC Camp Pendleton	Military	41.5	40.5	X	-	-	-	-	-	-	-	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	-	-	X	-	-	X	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	X	-	-	-	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	-	-	-	-	-	-
6068	Toro Energy of California	<b>Power Generation</b>	1.7	25.4	-	-	-	-	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	Х	-	-	-	-	-	-	Х	-
0935	Frazee Paint	Paint	20.8	20.9	-	-	-	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	Х	-	-	-	-	-	-	-	-
0673	California Products	Signs	16.4	16.4	Х	-	-	-	-	-	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	Х	-	-	-	-	-	-	-	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-	-	-	-	-	-	-
0099	Rohr Industries. (Goodrich)	Aviation Parts	14.2	14.2	Х	-	-	-	Х	-	-	Х	-
6656	CA ST of Dept. of Corrections	Detention Facility	13.9	13.9	Х	-	-	-	Х	-	-	-	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-	-	-	-	-	-	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	-	-	-	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-	-	-	-	-	-	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-	-	-	-	-	-	Х
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-	-	-	-	-	-	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	Х	-	-	-	-	-	-

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APCD Source	Facility Name	Facility Desc. (if applicable)	<b>VOC</b> (2018	<b>VOC</b> (2018		1	Diego (	County	<u>/ Majo</u>	hat Ap <mark>r Sour</mark>	ce Fac	ilities	
ID #		(ii applicable)	CARB)	District)	67.11	67.12.1	67.15	67.16	67.17	67.18	67.19	67.20.1	67.21
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	X	X	-	-	X	X	-	-	X
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-	-	X	-	-	1	-
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-	-	X	-	-	X	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	X	-	-	-	X	X	-	X	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	-	-	X	X	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	-	X	-	-	-	-
6068	Toro Energy of California	<b>Power Generation</b>	1.7	25.4	-	-	-	-	X	-	-	-	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	-	-	Х	-	-	-	-
0935	Frazee Paint	Paint	20.8	20.9	-	-	-	-	Х	-	Х	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	-	-	Х	Х	-	-	-
0673	California Products	Signs	16.4	16.4	-	-	-	-	Х	-	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-	-	-	-	-	-	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-	-	-	-	-	-	-
0099	Rohr Industries. (Goodrich)	Aviation Parts	14.2	14.2	-	-	-	-	Х	Х	-	-	-
6656	CA ST of Dept. of Corrections	Detention Facility	13.9	13.9	-	-	-	-	Х	-	-	Х	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-	-	-	-	-	-	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	-	-	-	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-	-	-	-	-	-	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-	-	-	-	-	-	-
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-	-	-	-	-	-	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	-	-	Х	-	-	-	Х

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APCD Source	Facility Name	Facility Desc.	<b>VOC</b> (2018	<b>VOC</b> (2018	Sar		es Evaluate County Ma		-			ties
ID #		(if applicable)	· ·	District)	67.22	67.24	67.25 (Proposed)	68	68.1	69	69.2	69.2.1
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	-	-	-	-	-	-	-	-
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-	-	-	-	-	-
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-	-	-	-	-	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	-	-	-	-	-	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	-	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	-	-	-	X	-
6068	Toro Energy of California	<b>Power Generation</b>	1.7	25.4	-	-	-	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	-	-	-	-	-	-
0935	Frazee Paint	Paint	20.8	20.9	-	-	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	-	Х	-	-	-	-
0673	California Products	Signs	16.4	16.4	-	-	-	-	-	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-	-	-	-	Х	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-	-	-	-	-	-
0099	Rohr Industries. (Goodrich)	Aviation	14.2	14.2	-	-	-	-	-	-	-	-
6656	CA ST of Dept. of Corrections	<b>Detention Facility</b>	13.9	13.9	-	Х	-	-	-	-	Х	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-	-	-	-	-	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	-	-	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-	-	-	-	-	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-	-	-	-	-	-
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-	-	-	-	-	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	-	-	-	-	-	-

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	Facility Name	Facility Desc.	<b>VOC</b> (2018	<b>VOC</b> (2018	Sa			ted that Apply to Major Source Faci	lities	
ID #		(if applicable)	CARB)	· ·	69.2.2*	69.3	69.3.1	69.4 (To Be Repealed)	69.4.1	69.5
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	-	-	-	-	X	-
	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-	-	X	-
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-	-	X	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	-	-	X	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	-	-	X	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-	X	X	-
6068		<b>Power Generation</b>	1.7	25.4	-	-	-	X	X	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	-	-	Х	-
	Frazee Paint	Paint	20.8	20.9	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	Х	-	Х	-
0673	California Products	Signs	16.4	16.4	-	-	-	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-	-	-	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-	-	Х	-
0099	Rohr Industries. (Goodrich)	Aviation	14.2	14.2	-	-	-	-	Х	-
6656	CA ST of Dept. of Corrections	<b>Detention Facility</b>	13.9	13.9	-	Х	Х	-	Х	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-	-	Х	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-	-	Х	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	Х	Х	-	-	-
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-	-	Х	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	Х	-	-	Х	-

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-Four landfills in CARB's 2018 emission inventory report VOC emissions over 12.5 tons per year. These include "SD City of Miramar" (Source ID #88196), "Sycamore Landfill Inc" (Source ID #8719), "Otay Landfill Inc." (Source ID #7263), and "SD Cnty/ San Marcos II Landfill" (Source ID #8717). However, the CARB data includes fugitive landfill emissions, which are not included in the federal determination of a major source. Non-fugitive emissions from each of these four facilities is less than two tons of VOC per year. Thus, these four facilities have not been included in Attachment D as a major source of VOC.

\* *Rule 69.2.2* intends to control a previously unregulated source category in San Diego County. Consequently, the District does not currently have sufficient data as to what major sources have units in the applicable size range. However, for RACT purposes, it was assumed at least one of the sources listed in the table had an operational unit subject to the proposed rule, thus making it subject to RACT requirements.

	Facility Name	Facility Desc.	<b>VOC</b> (2018	<b>VOC</b> (2018		les Evaluated t	that Apply to or Source Facilities
ID #		(if applicable)		District)		69.6	Flare Rule (# TBD)
0019	NASSCO / General Dynamics	Shipbuilder	105.6	105.9	-	-	-
0091	Sfpp Lp / Sante Fe Pacific Pipeline	Fuel Terminal	57.7	57.9	-	-	-
0221	USMC Camp Pendleton	Military	41.5	40.5	-	-	-
0094	USN North Island (minus TSE)	Military	36.4	39.5	-	-	-
4845	USN Naval Station (minus TSE)	Military	25.5	36.2	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	29.0	32.0	-	-	-
6068	Toro Energy of California	<b>Power Generation</b>	1.7	25.4	-	-	-
4824	USMC Air Stat-Miramar	Military	23.7	23.8	-	-	-
0935	Frazee Paint	Paint	20.8	20.9	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	19.0	19.0	-	-	-
0673	California Products	Signs	16.4	16.4	-	-	-
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	15.9	15.9	-	-	-
96655	COSTCO Wholesale	Gas Station	14.5	14.5	-	-	-
0099	Rohr Industries. (Goodrich)	Aviation	14.2	14.2	-	-	-
6656	CA ST of Dept. of Corrections	<b>Detention Facility</b>	13.9	13.9	-	-	-
98102	COSTCO Wholesale	Gas Station	13.9	13.9	-	-	-
9541	COSTCO Wholesale	Gas Station	13.6	13.6	-	-	-
97026	COSTCO Wholesale	Gas Station	13.4	13.4	-	-	-
0118	CP Kelco	Kelp Processing	12.9	12.9	-	-	-
97360	COSTCO Wholesale	Gas Station	12.7	12.7	-	-	-
0651	Hydranautics	Membrane Mfr.	-	12.6	-	-	-

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APCD		Facility Desc.	NOx	NOx							t Apply		
	Facility Name	(if applicable)	(2018	(2018							ource		
ID #			CARB)	District)	59	59.1	61.0	61.1	61.2	61.3	61.3.1	61.4	61.4.1
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	-	-	-	-	-	-	-	-	-
10882	Otay Mesa Energy Center	Power Generation	70.5	70.5	-	-	-	-	-	-	-	-	-
8013	SDG&E Palomar Energy Center	Power Generation	52.0	52.0	-	-	-	-	-	-	-	-	-
0351	SD State University	College	50.8	50.9	-	-	-	-	-	-	-	-	-
96387	<i>Minnesota Methane San Diego LLC/Neo San Diego LLC</i>	Power Generation	49.1	49.1	-	-	-	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	-	-	-	-	-	-	-	-	-
0415	Appl. Energy-NAV STA	Power Generation	45.4	45.5	-	-	-	-	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	-	-	-	-	-	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	-	-	-	-	-	-	-	-	-
6068	Toro Energy of California	Power Generation	43.7	37.7	-	-	-	-	-	-	-	-	-
0149	Appl. Energy-MCRD	Power Generation	35.2	35.2	-	-	-	-	-	-	-	-	-
0221	USMC Camp Pendleton	Military	29.9	30.6	-	-	-	-	-	-	-	-	-
96224	Minnesota Methane LLC	Power Generation	30.0	30.1	-	-	-	-	-	-	-	-	-
7263	Otay Landfill Inc.	Flares	23.6	23.6	Х	-	-	-	-	-	-	-	-
0100	GKN Aerospace Chemtronics	Aviation	21.4	21.5	-	-	-	-	-	-	-	-	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	-	-	-	-	-	-
0171	Grossmont District Hospital	Hospital	19.2	19.3	-	-	-	-	-	-	-	-	-
6257	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-	-
8719	Sycamore Landfill Inc.	Flares	16.1	16.1	-	Х	-	-	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	15.6	15.7	-	-	Х	Х	Х	Х	Х	Х	Х
8469	Goal Line LP	Power Generation	14.5	14.5	-	-	-	-	-	-	-	-	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	-	-	-	-	-	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	-	-	Х	-	-	Х	Х	Х	Х
89296	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	-	-	-	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	Х	-	-	-	-	-	-	-	-

APCD	Essility Name	Facility Desc.	<b>NOx</b> (2018	<b>NOx</b> (2018	9						pply to irce Fa		e
ID #	Facility Name	(if applicable)	CARB)	District)	61.5	61.6		61.8	64	1	67.0.1		
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	-	-	-	-	-	-	X	-	-
10882	Otay Mesa Energy Center	Power Generation	70.5	70.5	-	-	-	-	-	-	-	-	-
8013	SDG&E Palomar Energy Center	Power Generation	52.0	52.0	-	-	-	-	-	-	-	-	-
0351	SD State University	College	50.8	50.9	-	-	-	-	-	X	-	-	-
96387	Minnesota Methane San Diego LLC/Neo San Diego LLC	Power Generation	49.1	49.1	-	-	-	•	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	-	-	•	-	-	-	-	-	-
0415	Appl. Energy-NAV STA	Power Generation	45.4	45.5	-	-	-	-	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	-	-	-	-	X	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	-	-	-	-	-	-	-	-	-
6068	Toro Energy of California	Power Generation	43.7	37.7	-	-	-	-	-	-	-	-	-
0149	Appl. Energy-MCRD	Power Generation	35.2	35.2	-	-	-	-	-	-	-	-	-
0221	USMC Camp Pendleton	Military	29.9	30.6	-	-	-	-	-	-	-	-	-
96224	Minnesota Methane LLC	Power Generation	30.0	30.1	-	-	-	-	-	-	-	-	-
7263	Otay Landfill Inc.	Flares	23.6	23.6	-	-	-	-	-	-	-	-	-
0100	GKN Aerospace Chemtronics	Aviation	21.4	21.5	-	-	-	-	-	-	-	-	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	-	-	-	-	-	-
0171	Grossmont District Hospital	Hospital	19.2	19.3	-	-	-	-	-	-	-	-	-
6257	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-	-
8719	Sycamore Landfill Inc.	Flares	16.1	16.1	-	-	-	-	-	-	Х	-	-
4824	USMC Air Stat-Miramar	Military	15.6	15.7	-	-	-	Х	-	-	-	-	-
8469	Goal Line LP	Power Generation	14.5	14.5	-	-	-	-	-	-	-	-	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	-	-	-	-	-	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	-	-	-	Х	-	-	-	-	-
89296	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	-	-	-	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	-	-	-	-	-	-	-	-	-

APCD		Facility Desc.	NOx	NOx					uated t		-		
	Facility Name	(if applicable)	(2018	(2018					y Majo				
ID #		(ii applicable)	CARB)	District)	67.3	67.4	67.5	67.6	67.6.1	67.6.2	67.7	67.9	67.10
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	X	-	-	-	-	-	-	-	-
10882	Otay Mesa Energy Center	Power Generation	70.5	70.5	-	-	-	-	-	-	-	-	-
8013	SDG&E Palomar Energy Center	Power Generation	52.0	52.0	-	-	-	-	-	-	-	-	-
0351	SD State University	College	50.8	50.9	-	-	-	-	-	-	-	-	-
96387	<i>Minnesota Methane San Diego LLC/Neo San Diego LLC</i>	Power Generation	49.1	49.1	-	-	-	I	-	-	I	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	X	-	-	I	-	-	1	-	-
0415	Appl. Energy-NAV STA	Power Generation	45.4	45.5	-	-	-	I	-	-	1	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	-	ł	-	-	1	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	-	-	-	-	-	-	-	-	X
6068	Toro Energy of California	Power Generation	43.7	37.7	-	-	-	-	-	-	-	-	-
0149	Appl. Energy-MCRD	Power Generation	35.2	35.2	-	-	-	-	-	-	-	-	-
0221	USMC Camp Pendleton	Military	29.9	30.6	X	-	-	-	-	-	-	-	-
96224	Minnesota Methane LLC	Power Generation	30.0	30.1	-	-	-	-	-	-	-	-	-
7263	Otay Landfill Inc.	Flares	23.6	23.6	-	-	-	-	-	-	-	-	-
0100	GKN Aerospace Chemtronics	Aviation	21.4	21.5	Х	-	-	-	Х	Х	-	Х	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	-	-	-	-	-	-
0171	Grossmont District Hospital	Hospital	19.2	19.3	-	-	-	-	-	-	-	-	-
6257	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-	-
8719	Sycamore Landfill Inc.	Flares	16.1	16.1	-	-	-	-	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	15.6	15.7	Х	-	-	-	-	-	-	Х	-
8469	Goal Line LP	Power Generation	14.5	14.5	-	-	-	-	-	-	-	-	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	Х	-	-	-	-	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	Х	-	-	-	Х	Х	-	-	-
89296	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	-	-	-	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	-	-	-	I	-	-	-	-	-

APCD		Facility Desc.	NOx	NOx						hat Ap			
	Facility Name	(if appliaable)	(2018	(2018								cilities	
ID #			,	District)	67.11	67.12.1	67.15	67.16	67.17	67.18	67.19	67.20.1	67.21
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	-	-	-	-	-	-	-	-	-
10882	Otay Mesa Energy Center	Power Generation	70.5	70.5	-	-	-	-	-	-	-	-	-
8013	SDG&E Palomar Energy Center	Power Generation	52.0	52.0	-	-	-	-	-	-	-	-	-
0351	SD State University	College	50.8	50.9	X	-	-	-	X	-	-	-	X
96387	<i>Minnesota Methane San Diego LLC/Neo San Diego LLC</i>	Power Generation	49.1	49.1	-	-	-	I	-	-	I	I	-
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	-	-	-	-	X	X	-	-	-
0415	Appl. Energy-NAV STA	<b>Power Generation</b>	45.4	45.5	-	-	-	•	-	-	•	•	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	-	•	X	-	•	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	-	-	-	-	-	-	-	-	-
6068	Toro Energy of California	<b>Power Generation</b>	43.7	37.7	-	-	-	-	X	-	-	•	-
0149	Appl. Energy-MCRD	<b>Power Generation</b>	35.2	35.2	-	-	-	-	-	-	-	-	-
0221	USMC Camp Pendleton	Military	29.9	30.6	-	-	-	-	X	-	-	X	-
96224	Minnesota Methane LLC	<b>Power Generation</b>	30.0	30.1	-	-	-	-	-	-	-	-	-
7263	Otay Landfill Inc.	Flares	23.6	23.6	-	-	-	-	-	-	-	-	-
0100	GKN Aerospace Chemtronics	Aviation	21.4	21.5	Х	-	-	-	Х	Х	-	Х	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	-	-	-	-	-	-
0171	Grossmont District Hospital	Hospital	19.2	19.3	-	-	-	-	-	-	-	-	-
6257	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-	-
8719	Sycamore Landfill Inc.	Flares	16.1	16.1	-	-	-	-	Х	-	-	-	-
4824	USMC Air Stat-Miramar	Military	15.6	15.7	-	-	-	-	Х	-	1	I	-
8469	Goal Line LP	Power Generation	14.5	14.5	-	-	-	-	-	-	1	I	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	Х	-	-	-	Х	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	Х	-	-	-	Х	-	-	Х	Х
89296	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	-	-	-	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	-	-	-	-	-	-	-	-	-

APCD Source	Facility Name	Facility Desc.	<b>NOx</b> (2018	<b>NOx</b> (2018			Rules Eva Diego Cour	nty				-	ities
ID #		(if applicable)	CARB)	District)	67.22	67.24	67.25 (Proposed)	68	68.1	69	69.2	69.2.1	69.2.2*
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	-	-	-	-	-	-	X	-	-
10882	Otay Mesa Energy Center	<b>Power Generation</b>	70.5	70.5	-	-	-	-	-	-	-	-	-
8013	SDG&E Palomar Energy Center	<b>Power Generation</b>	52.0	52.0	-	-	-	-	-	-	-	-	-
0351	SD State University	College	50.8	50.9	-	-	-	-	-	-	X	X	-
96387	<i>Minnesota Methane San Diego LLC/Neo San Diego LLC</i>	Power Generation	49.1	49.1	I	-	-	-	-	-	-	-	-
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	-	-	-	X	-	-	-	-	-
0415	Appl. Energy-NAV STA	Power Generation	45.4	45.5	-	-	-	X	-	-	X	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	-	-	-	-	X	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	-	-	-	-	-	-	-	-	-
6068	Toro Energy of California	Power Generation	43.7	37.7	-	-	-	-	-	-	-	-	-
0149	Appl. Energy-MCRD	Power Generation	35.2	35.2	1	-	-	X	-	-	X	-	-
0221	USMC Camp Pendleton	Military	29.9	30.6	1	-	-	-	-	-	-	-	-
96224	Minnesota Methane LLC	<b>Power Generation</b>	30.0	30.1	-	-	-	-	-	-	-	-	-
7263	Otay Landfill Inc.	Flares	23.6	23.6	-	-	-	-	-	-	-	-	-
0100	GKN Aerospace Chemtronics	Aviation	21.4	21.5	-	-	-	-	-	-	-	-	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	-	-	-	-	-	-
0171	Grossmont District Hospital	Hospital	19.2	19.3	-	-	-	-	-	-	Х	-	-
6257	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-	-
8719	Sycamore Landfill Inc.	Flares	16.1	16.1	-	-	Х	I	-	-	-	-	-
4824	USMC Air Stat-Miramar	Military	15.6	15.7	-	-	-	I	-	-	-	-	-
8469	Goal Line LP	Power Generation	14.5	14.5	-	-	-	-	-	-	Х	-	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	-	-	-	-	-	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	-	-	-	-	-	-	Х	-	-
89296	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	-	-	-	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	-	-	-	Х	-	-	-	-	-

NOTES: -Bold and Italic denotes a source which has been evaluated and determined to conclusively be a major source (25 tons per year or more), based on CARB and/or recent District data. Grey denotes a large source that demonstrated actual emissions within 50% (12.5 tons) of being a major source, based either on 2018 CARB Facility Search Data or 2018 District data.

\* Rule 69.2.2 intends to control a previously unregulated source category in San Diego County. Consequently, the District does not currently have sufficient data as to what major sources have units in the applicable size range. However, for RACT purposes, it was assumed at least one of the sources listed in the table had an operational unit subject to the proposed rule, thus making it subject to RACT requirements.

							Rules Eval					
APCD	Facility Name	Facility Desc.	<b>NOx</b> (2018	<b>NOx</b> (2018		San D	iego Coun 69.4	ty majo	or So		acilit	
Source ID #	Facility Name	(if applicable)		District)	60.2	60 2 1		69.4.1	60 5	60 F 1	60 6	Flare Rule
10 #			CARD)		09.5	09.3.1	Repealed)	09.4.1	09.5	09.5.1	09.0	(# TBD)
1795	Solar Turbines-Ruffin Rd	Turbine Mfr.	90.4	90.5	-	-	-	-	-	-	-	-
10882	Otay Mesa Energy Center	Power Generation	70.5	70.5	-	X	X	X	-	-	-	-
-	SDG&E Palomar Energy Center	Power Generation	52.0	52.0	X	X	-	X	-	-	-	-
0351	SD State University	College	50.8	50.9	X	X	-	X	-	-	-	-
	Minnesota Methane San Diego LLC/Neo San Diego LLC	Power Generation	49.1	49.1	-	-	-	X	-	-	-	x
0073	Cabrillo Pwr1-Encina	Power Generation	45.9	45.9	-	X	-	X	-	-	-	-
0415	Appl. Energy-NAV STA	Power Generation	45.4	45.5	X	X	-	-	-	-	-	-
3680	SD City/ Pt. Loma Trmt. Plant	Wastewater	38.5	38.6	-	-	X	X	-	-	-	-
0118	CP Kelco	Kelp Processing	38.0	38.0	X	X	-	1	-	-	-	-
6068	Toro Energy of California	Power Generation	43.7	37.7	-	I	X	X	-	-	-	-
	Appl. Energy-MCRD	Power Generation	35.2	35.2	X	X	-	X	-	-	-	-
	USMC Camp Pendleton	Military	29.9	30.6	-	I	-	X	-	-	-	-
96224	Minnesota Methane LLC	Power Generation	30.0	30.1	-	-	X	X	-	-	-	-
	Otay Landfill Inc.	Flares	23.6	23.6	-	-	Х	Х	-	-	-	Х
	GKN Aerospace Chemtronics	Aviation	21.4	21.5	-	-	-	Х	-	-	-	-
5985	Encina Waste Water Authority	Wastewater Treatment	19.3	19.4	-	-	-	Х	-	-	-	-
	Grossmont District Hospital	Hospital	19.2	19.3	-	Х	-	Х	-	-	-	-
	Sycamore Energy LLC	Power Generation	17.0	17.0	-	-	-	-	-	-	-	-
	Sycamore Landfill Inc.	Flares	16.1	16.1	-	-	-	-	-	-	-	Х
	USMC Air Stat-Miramar	Military	15.6	15.7	-	-	-	Х	-	-	-	-
8469	Goal Line LP	Power Generation	14.5	14.5	-	Х	-	-	-	-	-	-
0167	Solar Turbines-Pacific Hwy	Turbine Mfr.	14.1	14.1	-	-	-	Х	-	-	-	-
1969	Southern Calif. Edison Co.	Power Generation	4.8	13.3	-	-	-	Х	-	-	-	-
	SD Metro Pumping Station #2	Wastewater Treatment	12.9	12.9	-	-	Х	Х	-	-	-	-
8717	SD Cnty/ San Marcos II Landfill	Flares	11.8	12.6	-	-	-	-	-	-	-	Х

# ATTACHMENT E – District Rules Evaluated for 2020 RACT

Rule		ACT?	Date First Adopted	Date Last Revised	EPA Action		FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
REGULAT	<b>ION I - GENERAL PROVISIO</b>	NS							
1	Title	No	4/30/80	N/A	Approved	U///X/X1	46 FR 47452	NOT SUBJECT TO RACT REQUIREMENTS	
2	Definitions	No	5/15/96	7/11/17	Approved	6/21/17	82 FR	NOT SUBJECT TO RACT REQUIREMENTS	
4	Review of Rule	No	1/1/70	N/A	Approved	9/22/72	37 FR 10812	NOT SUBJECT TO RACT REQUIREMENTS	
REGULAT	ION II - PERMITS								
10	Permits Required	No	4/6/83	7/25/95	Approved	2/11/02	63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	
11	Exemptions	No	9/20/78	10/30/19	Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
17	Cancellation of Applications	No	4/30/80	11/25/81	Approved		63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	
19	Provision of Sampling and Testing Facilities	No	7/30/80	4/6/93	Approved	3/11/98	63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	
19.2	Continuous Emission Monitoring Requirements	No	12/13/78	N/A	Approved	0/20/01	46 FR 47452	NOT SUBJECT TO RACT REQUIREMENTS	
19.3	Emission Information	No	5/15/96	6/30/21 (proposed)	Approved	3/9/00	65 FR 12472	NOT SUBJECT TO RACT REQUIREMENTS	

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised	EPA Action		Approval	RACT Analysis Findings	SIP Submittal / Approval Status
20	Standards for Granting Applications	No	1/17/72	4/25/89	Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
20.1	Definitions, Emission Calculations, Emission Offsets and Banking, Exemptions, and Other Requirements	No	7/5/79	6/26/19	Conditionally Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
20.2	Standards for Authority to Construct - Best Available Air Pollution Control Technology	No	7/5/79	6/26/19	Conditionally Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
20.3	Standards for Authority to Construct - Air Quality Analysis	No	7/5/79	6/26/19	Conditionally Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
20.4	Standards for Authority to Construct - Major Stationary Sources	No	7/5/79	6/26/19	Conditionally Approved	11/5/18	83 FR	NOT SUBJECT TO RACT REQUIREMENTS	
20.5	Power Plants	No	7/5/79	N/A	Approved	4/14/81	46 FR 21757	NOT SUBJECT TO RACT REQUIREMENTS	
20.6	Standards for Permit to Operate - Air Quality Analysis	No	7/5/79	4/27/16	Conditionally Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	
21	Permit Conditions	No	4/1/81	11/29/94	Approved	3/11/98	63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	
24	Temporary Permit to Operate	No	3/20/96	6/29/16	Approved	11/5/18	83 FR 50007	NOT SUBJECT TO RACT REQUIREMENTS	

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action			RACT Analysis Findings	SIP Submittal / Approval Status
25	Appeals	No	1/1/69	6/21/00	Approved	9/22/72	37 FR 19812	NOT SUBJECT TO RACT REQUIREMENTS	
27.1	Federal Requirements for the San Diego County Air Pollution Control District's Alternative Mobile Source Emission Reduction Program Approved on September 8, 2000	No	8/6/08	N/A	Approved	6/3/00	74 FR 26525	NOT SUBJECT TO RACT REQUIREMENTS	
REGULAT	ON IV - PROHIBITIONS								
50	Visible Emissions	No	12/13/78	8/13/97	Approved		63FR 67/10	NOT SUBJECT TO RACT REQUIREMENTS	
51	Nuisance	No	1/1/69	N/A	Approved	9/22/72	37 FR 19812	NOT SUBJECT TO RACT REQUIREMENTS	CARB will request to be withdrawn from SIP
52	Particulate Matter	No	9/21/83	1/22/97	Approved	1.1/0/08	63 FR 67784	NOT SUBJECT TO RACT REQUIREMENTS	
53	Specific Contaminants	No	9/21/83	1/22/97	Approved	1.1/0/08	63 FR 67784	NOT SUBJECT TO RACT REQUIREMENTS	
53.1	Scavenger Plants	No	1/1/69	N/A	Approved	(1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	37 FR 19812	NOT SUBJECT TO RACT REQUIREMENTS	
54	Dusts and Fumes	No	1/22/97	N/A	Approved	1.7/0/08	63 FR 67784	NOT SUBJECT TO RACT REQUIREMENTS	

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	Approval	•	SIP Submittal / Approval Status
58	Incinerator Burning	No	1/17/73	N/A	Approved	5/11/77	42 FR 23805	NOT SUBJECT TO RACT REQUIREMENTS	
59	Control of Waste Disposal Site Emissions	No	11/3/87	N/A	-	-	-	NOT SUBJECT TO RACT REQUIREMENTS BECAUSE NO MAJOR SOURCES.	Not being submitted into SIP
59.1	Municipal Solid Waste Landfills	No	6/17/98	N/A	-	-	-	NOT SUBJECT TO RACT REQUIREMENTS BECAUSE NO MAJOR SOURCES.	Not being submitted into SIP
60	Circumvention	No	1/1/69	5/17/94	Approved	3/9/00	65 FR 12472	NOT SUBJECT TO RACT REQUIREMENTS	
61.0	Definitions Pertaining to the Storage and Handling of Organic Compounds	No	5/6/77	10/16/90	Approved	9/13/93	58 FR 47831	NOT SUBJECT TO RACT REQUIREMENTS	
61.1	Receiving & Storing Volatile Organic Compounds at Bulk Plants & Bulk Terminals	Yes	5/6/77	1/10/95	Approved	8/8/95	60 FR 40285	As stringent as SCAQMD Rule 463. More stringent requirements of SCAQMD Rule 1178 would not provide significant VOC reduction.	

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACI Analysis	SIP Submittal / Approval Status
61.2	Transfer of Organic Compounds into Mobile Transport Tanks	Yes	5/6/77	7/26/00	Approved	8/26/03	68 FR 51186	Generally as stringent as requirements in SJVAPCD Rule 4621.	Proposed amended rule being submitted into SIP upon adoption
61.3	Transfer of Volatile Organic Compounds into Stationary Storage Tanks	Yes	5/6/77	10/16/90	Approved	6/30/93	58 FR 34906	Supplemented as RACT by Rule 61.3.1	
61.3.1	Transfer of Gasoline into Stationary Underground Storage Tanks	Yes	3/1/06	N/A	Pending submittal to EPA	Ų	Pending submittal to EPA	State Enhanced Vapor Recovery Program, Supplements Rule 61.3 as RACT	Being submitted into SIP
61.4	Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks	Yes	5/6/77	3/26/08	Approved	01/07/2013	78 FR 898	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS	
61.4.1	Transfer of Gasoline from Stationary Underground Storage Tanks into Vehicles Fuel Tanks	Yes	3/1/06	3/26/08	-	-	-	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS	Not being submitted into SIP
61.5	Visible Emission Standards for Vapor Control System	No	5/6/77	9/20/78	Approved	4/14/81	46 FR 21757	NOT SUBJECT TO RACT REQUIREMENTS	
61.6	NSPS Requirements for Storage of Volatile Organic Compounds	No	5/6/77	1/13/87	-	-	-	NOT SUBJECT TO RACT REQUIREMENTS	Not being submitted into SIP
61.7	Spillage and Leakage of Volatile Organic Compounds	No	9/20/78	1/13/87	Approved	3/11/98	63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date		RACT Analysis Findings	SIP Submittal / Approval Status
61.8	Certification Require. for Vapor Control Equip.	No	2/22/84	1/13/87	Approved	3/11/98	63 FR 11831	NOT SUBJECT TO RACT REQUIREMENTS	
62	Sulfur Content of Fuels	No	10/21/81	N/A	Approved	7/6/82	47 FR 29233	NOT SUBJECT TO RACT REQUIREMENTS	
64	Reduction of Animal Matter	No	7/22/81	N/A	Approved	7/6/82	47 FR 29233	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS BECAUSE NO MAJOR SOURCES	
66.1	Miscellaneous Surface Coating Operations and Other Processes Emitting Volatile Organic Compounds	Yes	2/24/10 -	N/A 5/11/2016	Approved -	8/9/2012 -	77 FR 47536 -	REQUIREMENTS. NO MAJOR SOURCES	Amended rule not being submitted into SIP. Amended Rule withdrawn from submittal into the SIP. Rule approved in SIP on 8/9/2012 will remain in SIP for federal purposes.

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised	EPA Action		FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
67.0.1	Architectural Coatings	No	6/24/15	N/A	Approved		81 FR 68320	AREA SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS	
67.1	Alternative Emission Control Plans	No	5/21/91	5/15/96	Approved	3/27/97	62 FR 14639	NOT SUBJECT TO RACT REQUIREMENTS	
67.2	Dry Cleaning Equipment Using Petroleum - Based Solvent	Yes	1/31/78	5/15/96	Approved	3/27/97	62 FR 14639	NO FACILITIES SUBJECT TO CTG APPLICABILITY THRESHOLD. NOT SUBJECT TO RACT REQUIREMENTS. AS STRINGENT AS SCAQMD RULE 1102, 11/17/2000.	
67.3	Metal Parts and Products Coating Operations	Yes	5/9/79	4/9/03	Approved		68 FR 64538	As stringent as metal parts coating recommendations in Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08- 003, September 2008.	

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
67.4	Metal Container, Metal Closure & Metal Coil Coating Operations	Yes	5/9/79	11/9/11	Approved	9/20/12	58313	As stringent as SJVAPCD Rule 4604.	
67.5	Paper, Film and Fabric Coating Operations	Yes	5/9/79	5/15/96	Approved	3/27/97	62 FR 14639	NO FACILITIES SUBJECT TO CTG APPLICABILITY THRESHOLD. NOT SUBJECT TO RACT REQUIREMENTS.	
67.6.1	Cold Solvent Cleaning and Stripping Operations	Yes	5/23/07	5/23/2007	Approved	10/13/09	74 FR 52427	Rule requires administrative revisions to satisfy RACT	Proposed amended rule being submitted into SIP upon adoption
67.6.2	Vapor Degreasing Operations	Yes	5/23/07	5/23/2007	Approved	10/13/09	74 FR 52427	Previously approved rule reaffirmed as RACT	
67.7	Cutback and Emulsified Asphalts	Yes	8/29/79	5/15/96	Approved	3/27/97	62 FR 14639	As stringent as SJVAPCD Rule 4641, 12/17/1992.	
67.9	Aerospace Coating Operations	Yes	8/24/83	4/30/97	Approved	8/17/98	63 FR 43884	NO FACILITIES SUBJECT TO CTG APPLICABILITY THRESHOLD. NOT SUBJECT TO RACT REQUIREMENTS.	

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised		FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
67.10	Kelp Processing and Bio- Polymer Manufacturing Operations	No	1/30/85	6/25/97	Approved	6/22/98	63 FR 33854	Unique source- specific rule. No other rule to compare.	
	Wood Products Coating Operations	Yes	3/14/89	6/27/12	Approved	4/11/13	78 FR 21538	As stringent as SCAQMD Rule 1136, 6/19/1996.	
67.12.1	Polyester Resin Operations	Yes	5/11/16	N/A	Approved	5/2/18	83 FR 13869	As stringent as SCAQMD Rule 1162, July 8, 2005 and applicable CTG.	
6/15	Pharmaceutical & Cosmetic Manufacturing	Yes	10/18/88	5/15/96	Approved	3/27/97	62 FR 14639	NO FACILITIES SUBJECT TO CTG APPLICABILITY THRESHOLD. NOT SUBJECT TO RACT REQUIREMENTS.	

## ATTACHMENT E – District Rules Evaluated for 2020 RACT

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval		SIP Submittal / Approval Status
67.16	Graphic Arts Operations	Yes	10/18/88	11/9/11	Approved	9/20/12	77 FR 58313	Recently amended to be as stringent as CTG for Offset Lithographic Printing and Letterpress Printing, EPA- 453/R-06-002, September 2006, & CTG for Flexible Package Printing, EPA-453/R-06- 003, September 2006.	
67.17	Storage of Materials Containing Volatile Organic Compounds	Yes	3/7/90	5/15/96	Approved	3/27/97	62 FR 14639	Fulfills general house-keeping work practices recommendations of various CTGs.	
67.18	Marine Coating Operations	Yes	7/3/90	N/A	Approved	3/27/97	62 FR 14639	As stringent as applicable CTG and SCAQMD Rule 1106.	
67.19	Coatings and Printing Inks Manufacturing Operations	No	6/7/94	5/15/96	Approved	5/26/00	65 FR 34101	As stringent as SCAQMD Rule 1141.1, 11/17/2000.	

Rule	Rule Title	CTG/ ACT?	Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
67.20.1	Motor Vehicle and Mobile Equipment Coating Operations	Yes	6/30/10	N/A	-	-	-	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS BECAUSE NO MAJOR SOURCES.	Not being submitted into SIP
67.21	Adhesive Materials Application Operations	Yes	12/16/98	5/14/08	Approved	3/26/2020	85 FR 10611	As stringent as CTG for Miscellaneous Industrial Adhesives, EPA- 453/R-08-005, September 2008 and SJVAPCD Rule 4653. EPA determined rule was RACT in 2020.	
67.22	Expandable Polystyrene Foam Products Manufacturing Operations	No	6/7/94	5/15/96	-	-	-	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS BECAUSE NO SOURCES.	Not being submitted into SIP

Rule	Rule Title		Date First Adopted	Date Last Revised		FR Publication Date	Approval	_	SIP Submittal / Approval Status
67.24	Bakery Ovens	Yes	6/7/94	5/15/96	Approved	3/27/97	62 FR 14639	SOURCE CATEGORY NO LONGER SUBJECT TO RACT REQUIREMENTS BECAUSE NO MAJOR SOURCES.	
67.25 (Proposed)	Composting Operations (Non-Residential)	No	TBD	N/A	-	-	-	SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS.	Not being submitted into SIP upon adoption
68	Fuel-Burning Equipment - Oxides of Nitrogen	No	7/1/71	9/20/94	Approved	4/9/96	61 FR 15719	Supplemented as RACT by "69- series" rules	
68.1	NSPS Requirements for Oxides of Nitrogen from Fuel Burning Equipment	No	11/18/76	N/A	-	-	-	NOT SUBJECT TO RACT REQUIREMENTS	Not being submitted into SIP
69	Electrical Generating Steam Boilers, Replacement Units and New Units	No	1/18/94	12/12/95	-	-	-	NO MAJOR SOURCES. NOT SUBJECT TO RACT REQUIREMENTS	No sources applicable as of 1/1/19. Not being submitted into SIP

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
69.2	Industrial & Commercial Boilers, Process Heaters & Steam Generators	Yes	9/27/94	N/A	Approved	2/9/96	61 FR 4887	More stringent requirements of SJVAPCD Rule 4306 (October 16, 2008) and SCAQMD Rule 1146 (November 1, 2013) are not cost effective.	
69.2.1	Small Boilers, Process Heaters, and Steam Generators	Yes	3/25/09	7/8/20	Pending submittal to EPA	Pending submittal to EPA	Pending submittal to EPA	Amended rule as stringent as SCAQMD Rule 1146.2.	Amended rule being submitted into SIP
69.2.2	Medium Boilers, Process Heaters, and Steam Generators	Yes	7/8/20	N/A	Pending submittal to EPA	Pending submittal to EPA	Pending submittal to EPA	As stringent as SCAQMD Rule 1146.1, and SJVAPCD Rule 4307.	New rule being submitted into SIP
69.3	Stationary Gas Turbine Engines	Yes	9/27/94	N/A	Approved	6/27/97	62 FR 32691	To be Repealed upon EPA approval of proposed Amended Rule 69.3.1	

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
69.3.1	Stationary Gas Turbine Engines – Best Available Retrofit Control Technology	Yes	12/16/98	2/24/10 By 3/23/21 (proposed)	- Pending submittal to EPA	- Pending submittal to EPA	0	- Proposed Amended Rule Being Submitted upon adoption by March 23, 2021	Proposed amended rule being submitted upon adoption
69.4 (To be Repealed)	Stationary Reciprocating Internal Combustion Engines	Yes	9/27/94	7/30/03	Approved	1/4/06	71 FR 244	Rule is duplicative to requirements in amended Rule 69.4.1.	
69.4.1	Stationary Reciprocating Internal Combustion Engines – Best Available Retrofit Control Technology	Yes	11/15/00	7/8/20	Pending submittal to EPA		Pending submittal to EPA	New and existing engines. As stringent as SJVAPCD Rule 4702. Existing engines also subject to State Diesel Engine ATCM and federal NSPS IIII.	Amended rule being submitted into SIP. To Replace Rule 69.4 upon EPA SIP approval.
69.5.1	Natural Gas-Fired Water Heaters	No	6/24/15	N/A	-	-	-	AREA SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS	Not being submitted into SIP

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status
69.6	Natural Gas-Fired Fan-Type Central Furnaces	No	6/17/98	N/A	-	-	-	AREA SOURCE CATEGORY NOT SUBJECT TO RACT REQUIREMENTS	Not being submitted into SIP
70	Orchard Heaters	No	1/17/1972	N/A	Approved	9/22/72	37 FR 19812	NOT SUBJECT TO RACT REQUIREMENTS	
71	Abrasive Blasting	No	3/30/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS	
TBD (Proposed)	Control Measure)		By 3/23/21	-	Pending submittal to EPA	Pending submittal to EPA	Pending submittal to EPA	Proposed to be as stringent as comparable air district non- refinery RACT flare rules. More stringent requirements found in SCAQMD Rule 1118.1 are not cost-effective to be considered RACT.	Proposed new rule being submitted into SIP upon adoption
REGULAT	ON VI - BURNING CONTRO	Ĺ			· 1				
101	Burning Control	No	3/27/90	9/25/02	Approved	4/30/03	68 FR 23035	NOT SUBJECT TO RACT REQUIREMENTS	

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACI Analysis	SIP Submittal / Approval Status			
REGULAT	REGULATION VII - VALIDITY AND EFFECTIVE DATE											
140	Validity	No	1/1/69	N/A	Approved	9/22/72	37 FR 19812	NOT SUBJECT TO RACT REQUIREMENTS				
141	Effective Date	No	1/1/69	N/A	Approved	9/22/72	31 FR 10812	NOT SUBJECT TO RACT REQUIREMENTS				
REGULAT	<u>'ION VIII - SAN DIEGO AIR P</u>	OLLUT	ION CONT	ROL EMER	GENCY PLAN							
126	Applicability	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS				
127	Episode Criteria Levels	No	4/1/81	9/17/91	Approved	3/18/99	64 FR 13351	NOT SUBJECT TO RACT REQUIREMENTS				
128	Episode Declaration	No	5/25/77	9/17/91	Approved	3/18/99	64 FR 13351	NOT SUBJECT TO RACT REQUIREMENTS				
129	Episode Termination	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS				
130	Episode Actions	No	4/1/81	9/17/91	Approved	3/18/99	04 FR 13351	NOT SUBJECT TO RACT REQUIREMENTS				
131	Stationary Source Curtailment Plan	No	4/1/81	N/A	Approved	6/21/82	47 FR 26610	NOT SUBJECT TO RACT REQUIREMENTS				
132	Traffic Abatement Plan	No	4/1/81	12/17/97	Approved	6/21/82	47 FR 26610	NOT SUBJECT TO RACT REQUIREMENTS				
133	School	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS				

Rule	Rule Title		Date First Adopted	Date Last Revised	EPA Action	FR Publication Date		RACT Analysis Findings	SIP Submittal / Approval Status	
134	Source Inspection	No	4/1/81	N/A	Approved	6/21/82	47 FR 26610	NOT SUBJECT TO RACT REQUIREMENTS		
135	Air Monitoring Stations	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS		
136	Interdistrict and Interbasin Coordination	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS		
137	Emergency Action Committee	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS		
138	Procedures and Plans	No	5/25/77	N/A	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS		
REGULAT	ION IX -PUBLIC RECORDS			T	T	T	I	Γ		
175	General	No	5/22/74	N/A	Approved	5/11/77		NOT SUBJECT TO RACT REQUIREMENTS		
176	Information Supplied to District	No	5/22/74	N/A	Approved	5/11/77	42 FR 23805	NOT SUBJECT TO RACT REQUIREMENTS		
177	Inspection of Public Records	No	3/30/77	6/20/01	Approved	8/31/78	43 FR 38826	NOT SUBJECT TO RACT REQUIREMENTS		
REGULATION XII - TOXIC AIR CONTAMINANTS										
1203	Ethylene Oxide Sterilizers and Aerators	Yes	7/23/91	7/26/00	-	-	-	NOT SUBJECT TO RACT REQUIREMENTS. NO MAJOR SOURCES		

Rule	Rule Title		First	Date Last Revised	EPA Action	FR Publication Date	FR Rule Approval	RACT Analysis Findings	SIP Submittal / Approval Status	
REGULATION XV - FEDERAL CONFORMITY										
1 1011	Conformity of General Federal Actions	No	3/7/95	N/A	Approved	4/23/99	64 FR 10016	NOT SUBJECT TO RACT REQUIREMENTS		