PLACER COUNTY
AIR POLLUTION CONTROL DISTRICT

STAFF REPORT

2014 Reasonably Available Control Technology State Implementation Plan Analysis

April 2014

BACKGROUND

Purpose

The Placer County Air Pollution Control District (District) is required to update the Reasonably Available Control Technology State Implementation Plan ("RACT SIP") analysis. This requirement results from the District's classification as "severe" non-attainment with the national eight-hour ozone ambient air quality standard, and also non-attainment with the State of California ozone standard.

District Air Quality Attainment Status

The District's jurisdiction is all of Placer County. Placer County is located in northern California, bordering Sacramento County to the west and the State of Nevada on the east. Elevations range from near sea level in the western portion of the County to 9,000 feet in the mountains of the Sierras. Placer County is the only county in the state that is divided into three different air basins: the Sacramento Valley Air Basin (SVAB); the Mountain Counties Air Basin (MCAB); and the Lake Tahoe Air Basin (LTAB). Each air basin has its own meteorological and geographic conditions. Generally, the mediterranean climate in SVAB has summers that are hot and dry with temperatures regularly above 90˚F. These hot and dry summers are conducive to ozone formation. Prevailing winds from the west transport ozone from the San Francisco Bay Area and the Sacramento Valley into the foothill and mountain areas.

The portions of Placer County in the SVAB and MCAB are included in the Sacramento Federal Ozone Non-Attainment Area (SFONA). The SFONA has been classified as "severe" non-attainment for the National Ambient Air Quality Standard (NAAQS) for eight-hour ozone, as well as non-attainment with the State of California Ambient Air Quality Standard for ozone.

Federal RACT SIP Requirement

The U.S. Environmental Protection Agency's (U.S. EPA) Phase 2 Ozone Rule (40 CFR 51.912 and 70 FR 71612) requires that areas that are classified as moderate non-attainment or higher must demonstrate in a State Implementation Plan (SIP) that their rules fulfill Reasonably Available Control Technology (RACT) requirements for volatile organic compounds (VOC) and nitrogen oxides (NOx) which are ozone precursors, in accordance with Federal Clean Air Act Amendments of 1990 (CAAA), Sections 182(b)(2) and 182(f).

RACT is defined as "the lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility" (44 FR 53762). The implementation of RACT requires:

- Rules covering source categories with RACT guidance documents -- including Control Techniques Guideline (CTG) -- issued by U.S. EPA, for which there are sources in the District that have emission levels that trigger the RACT guidance document threshold.

- Rules consider the controls that have been implemented at other regional and local air districts.

- Rules covering all major sources of NOx or VOC that are in the District.

CTG guidance must be adopted in District rules, and RACT SIP revisions, generally within one year of the CTG issuance date.

State of California Ozone Reduction Requirements

In addition to federal SIP requirements, the District has chosen to implement Every Feasible Measure (EFM) to meet the ozone reduction requirements under State of California Health and Safety Code Section 40914(a)(2). The State of California suggests that EFMs consider regulations that have been successfully implemented elsewhere; consider new technologies and innovative approaches; and social, environmental, energy, and economic (cost effectiveness) factors.

Additionally, the District requires the use of Best Available Retrofit Control Technology (BARCT) for VOC and NOx as required under State of California Health and Safety Code Section 40919.

District Planning History

The District has adopted numerous air quality attainment plans since 1991 to move toward attainment of the NAAQS for ozone. Over 100 new rules and amendments have been adopted to meet the commitments in these attainment plans. The District is going to work with other air districts in the SFONA to prepare an "Eight-Hour Ozone Attainment Plan" for achieving the federal 2008 8-hour ozone standard (0.075 ppm).

Title	Board Adoption
1991 Placer County Air Quality Attainment Plan	March 1992
1994 Ozone Attainment Demonstration Plan	December 1994
1997 Triennial Progress Report	July 1998
1999 Sacramento Area Regional Milestone Report	April 2000
2000 Triennial Progress Report	April 2001
2002 Sacramento Area Regional Milestone Report	May 2003
2003 Triennial Progress Report	October 2005
Sacramento Regional Non-Attainment Area Eight-Hour Ozone Rate-of-Progress Plan	February 2006
Sacramento Regional Non-Attainment Area Eight-Hour Ozone and Reasonable Further Progress Plan	February 2009
2009 Triennial Progress Report	August 2010
2012 Triennial Progress Report	October 2013
Sacramento Regional PM2.5 Implementation/Maintenance Plan and Re-Designation Request	February 2014

District RACT SIP History

The District last conducted a RACT SIP analysis in 2006. This analysis required new rulemaking for the Metal Parts and Products source category, which was accomplished by the District through new District Rule 245, SURFACE COATING OF METAL PARTS AND PRODUCTS, adopted on 12/11/08, amended on 08/20/09, and recently SIP approved by U.S. EPA. The analysis also found that nine (9) District rules required re-submittal for SIP approval due to amendments that predated the last SIP approval, and nine (9) District rules that needed first-time SIP approval. The rules are undergoing state and U.S. EPA review for inclusion in the approved SIP.

The 2006 RACT SIP Analysis was followed by a subsequent partial update in 2008, in response to seven (7) new CTGs.

In 2011 a comprehensive analysis of RACT and Every Feasible Measure was conducted as well as an assessment of existing District rules requiring administrative amendment. The 2011 RACT SIP Analysis identified seven (7) District rules that required amendment to meet RACT and that one new RACT rule was required.

The 2013 RACT SIP Analysis conducted and approved by the District's Board on February 13, 2014, found that previous RACT Rule deficiencies had been corrected. A negative declaration regarding the absence of sources in Placer County subject to sixteen (16) CTG source categories was adopted, with required public notice having been given.

This April 2014 update is to address additional deficiencies identified in U.S. EPA Region IX review, including: (1) publicly notice a negative declaration for Polyester Resin Manufacturing source category, (2) consideration of VOCs from composting operations at the Western Regional Sanitary Landfill, (3) provide additional analysis for the determination that existing District rules meet RACT, and (4) provide a public notice and conduct a public hearing for the 2014 RACT SIP Analysis.

ANALYSIS METHODOLOGY

RACT SIP

The RACT SIP analysis involves the following procedures, consistent with U.S. EPA Region IX guidance (as contained in a letter from Andrew Steckel dated March 9, 2006):

- Source Category Identification: Identify all source categories in the District that require RACT. This must include:
  - Source categories which have RACT guidance, and for which any sources (either minor or major) operate in the District.
  - Source categories for which major sources of NOx or VOC operate in the District.
- RACT Determination: For each source category that requires RACT, identify if there is a District Rule. If there is no rule, then a new District rule that meets RACT must be developed and promulgated. If there is an existing District rule, then a determination must be made if the existing District rule reflects RACT. This is based on an analysis of the applicable District rule with guidance and regulations used to establish RACT:
  - Federal U.S. EPA: Control Technique Guidelines (CTG), Alternative Control Techniques (ACT), Maximum Achievable Control Technology (MACT) and National Emissions Standards Hazardous Air Pollutant (NESHAP) Standards, and New Source Performance Standards (NSPS).
  - State: California Air Resources Board (CARB) Suggested Control Measures, and State RACT guidance.
  - Local: Air districts in our region.

  The RACT determination will identify for each source category:

  - Existing District rules that meet RACT.
  - Existing District rules that require amendments to meet RACT.
  - New rules required to meet RACT.
- Negative Declaration: Negative declarations are required for all source categories for which there is federal RACT guidance but for which there are no operating facilities (major or minor) within the District, or for which there are facilities that have emissions below the RACT guidance threshold.

  To determine that there are no operating facilities in the District that fall under a source category with RACT guidance, the following checks were conducted:

  - District internal database of permitted sources.
  - Internet website searches for key words.
  - Business listings through city and county databases.
  - Industrial trade groups.
  - Yellow pages.

Every Feasible Measure

The EFM determination is based on a comparison of existing District rules with those in other districts in the Sacramento region.

RACT ANALYSIS

Identification of Source Categories

Source categories considered for the RACT SIP analysis include:

- All source categories that are affected by RACT guidance documents that have been published by the U.S. EPA. There are a total of fifty-one (51) source categories with RACT guidance documents -- including 31 CTGs, 18 ACTs, and 2 others (NSPS, MACT, and CARB Suggested Control Measures).

- All source categories that are affected by existing District rules that limit NOx or VOC. There are a total of twenty-four (24) District rules that limit NOx or VOC.

- All major sources of VOC or NOx that operate in the District. District Rule 502, NEW SOURCE REVIEW, defines major sources as those with permitted potential to emit greater than 25 tons per year of NOx or VOC. There are three major sources of NOx or VOC in the District – Rio Bravo Rocklin (biomass boiler), Sierra Pacific Industries (biomass boiler), and Roseville Electric Energy Park (natural gas turbine). These sources represent two source categories with existing District rules that control NOx and VOC: Rule 233, BIOMASS BOILERS, and Rule 250, STATIONARY GAS TURBINES.

  Additionally, the Western Regional Sanitary Landfill is a major source of VOC emissions from their green waste composting operations. The composting facility has a capacity of 83,000 green tons of green wastes, and a typical throughput of 60,000 green tons per year. Compost is processed in open windrows. Compost bed moisture is controlled to 50% and temperature from 45-55˚C, both of which are monitored daily. Compost windrows are mixed and aerated using a mechanical turner, at frequency as necessary to maintain temperature, moisture, and desired compost composition. The District has chosen to not directly control VOCs from the composting due to lack of consistency in the rules of other districts in the region, and lack of established cost effective control options.

  There is one additional major source in the District, PABCO/Gladding McBean, which is major for CO emissions only. Thus, a RACT rule is not required for this source.

RACT Determination

Existing District Rules Determined to Meet RACT

Table 1 lists the twenty (20) source categories for which there is an existing District rule that has been determined to satisfy RACT requirements. The table contains the following information: source category title; applicable federal guidance title, report number, and date; existing District rule number, title, and date of last rule amendment, if any; status and size of operating sources in the District; SIP approval status of the most recent District rule amendment, including Federal Register citation and publication date; and narrative discussion forming the basis for the determination that the rule meets RACT.

The table is divided into two sections:

- District rules for which the latest rule amendment has been SIP approved by U.S. EPA. These rules have been determined to meet RACT requirements because they have been reviewed and approved by CARB and U.S. EPA, and there has not been more-recent RACT guidance issued for the source category since the rule was SIP approved by U.S. EPA. Also, the rules have been determined to be consistent with state rules and the rules of other districts in the region. There are eighteen (18) rules in this category.

- District rules for which the last amendment has not been SIP approved by U.S. EPA. These rules have been determined to meet RACT because they meet the most recent RACT guidance, and have been determined to be consistent with state rules and the rules of other districts in the region. These rules have been either adopted by the District and submitted to the CARB for adoption and forwarding to U.S. EPA, or they have been submitted to U.S. EPA and are awaiting approval. There are three (3) rules in this category.

Determination that the existing District rules meet the applicable RACT guidance documents is made through a detailed comparison of the District rule with the RACT guidance document compliance requirements, including control measures through recommended limits on the volatile organic content of coatings and other VOC containing products, control device efficiency limitations, NOx limits from fuel combustion sources, recordkeeping and reporting, and test methods.

Determination that existing District rules are consistent with the rules of other districts in the region, is made through a survey and contact with districts in our region, including Sacramento, El Dorado, and Yolo-Solano.

Attachment 1 contains more details on the determination that supports that the existing District rule meets RACT.

Existing District Rules to be Amended

There are currently no existing rules that must be amended to meet RACT. Numerous District rules have recently been amended to meet RACT.

New District Rules

The District has adopted rules that meet RACT for each source category for which a Control Technique Guideline (CTG) document has been developed by U.S. EPA where there is source in that category in the District that exceeds the RACT guidance threshold, or for which there is a major NOx or VOC source. No new rules are required to be adopted to meet RACT.

Negative Declarations

Table 2 lists the seventeen (17) source categories for which there is RACT guidance (CTG), but for which the District has determined there are no sources in the category, or if any sources were found, the source's potential VOC and NOx emissions are less than the RACT guidance threshold.

A negative declaration, with associated public notification and District board approval, was adopted for sixteen (16) of these source categories (all except Polyester Resins Manufacturing) on February 13, 2014, asserting that there are no sources exceeding RACT guidance thresholds located in the District.

For the remaining source category, Polyester Resins Manufacturing, a negative declaration public notification was published on March 9, 2014, and District Board approval is scheduled for April 10, 2014 in a public hearing.

New sources are subject to the requirements of District Rule 502, NEW SOURCE REVIEW, which are significantly more stringent than RACT.

Table 2 also lists fourteen (14) source categories for which there is ACT guidance, but for which the District does not have any such sources.

Every Feasible Measure

Table 3 lists all source categories for which the state has identified the requirement of an evaluation for the need of Every Feasible Measure. Existing District rules satisfy EFM requirements, as documented in Table 3.

New Rules to be Adopted to Meet "Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan"

The District has no outstanding and unfulfilled commitments for new rules as part of our "Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan" (Regional Attainment Plan).

The Regional Attainment Plan will undergo revisions in 2015/2016, which may result in selection of new rulemakings for additional source categories.

ANALYSIS

The following Analysis and the subsequent Findings are intended to address the requirements set forth in the California Health and Safety Code relating to adoption of RACT SIP Analysis (and new or amended District rules), as well as other state statutes referenced herein.

1. Cost-Effectiveness of a Control Measure

California Health & Safety Code (H&S) Section 40703 requires the District to consider and make public the "cost-effectiveness" of District control measures. The cost effectiveness of the RACT SIP Analysis findings and recommendation -- the new rules and rule amendments needed to meet RACT -- will be assessed in detail when each of the separate rules are developed and adopted by the Board in the future to ensure that they are acceptable. There is no immediate cost impact of these RACT SIP Analysis recommendations.

2. Socioeconomic Impact

H&S Section 40728, in relevant part, requires the Board to consider the socioeconomic impact of any new or amended rule if air quality or emission limits are significantly affected. The expected socioeconomic impact of the RACT SIP Analysis (and new rules and rule amendments to meet RACT) will be assessed when the rules are adopted to ensure that they are acceptable.

3. Environmental Review and Compliance

California Public Resources Code Section 21159 requires that an environmental analysis of the reasonably foreseeable methods of compliance should be conducted. The RACT SIP analysis (and new rules and rule amendments required to meet RACT) will reduce emissions from sources and will not cause any significant adverse effects on the environment. There are no adverse environmental impacts that will be caused by compliance with the new rules and rule amendments. Nonetheless, an environmental review will be conducted at the time each rule or rule amendment is proposed for adoption.

The RACT SIP analysis is exempt from the California Environmental Quality Act (CEQA) because: (1) it can be seen with certainty that there is no possibility that the activity in question may have a significant adverse effect on the environment (CEQA Guidelines §15061(b)(3)); and (2) it is an action by a regulatory agency for protection of the environment (Class 8 Categorical Exemption, CEQA Guidelines §15308).

FINDINGS

A. **Necessity**: The adoption of the RACT SIP Analysis satisfies the District's objective to reduce VOCs to achieve attainment with ambient air standards for ozone, and meets the District's requirements to implement Every Feasible Measure as required under California Health and Safety Code Sections 40919.

B. **Authority**: California Health and Safety Code, Sections 40000, 40001, 40701, 40702, 40716, 41010, and 41013, are provisions of law that provide the District with the authority to adopt this RACT SIP Analysis.

C. **Clarity:** There is no indication at this time that the RACT SIP Analysis is written in such a manner that persons affected by the analysis cannot easily understand them.

D. **Consistency:** The RACT SIP Analysis is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

E. **Non-Duplication:** The RACT SIP Analysis does not impose the same requirements as an existing state or federal regulation.

F. **Reference:** All statutes, court decisions, and other provisions of law used by the District in interpreting this RACT SIP Analysis are incorporated into this analysis and this finding by reference.

SUMMARY

The RACT SIP Analysis has determined the need for the following District action:

- Negative declaration for Polyester Resins Manufacturing. A negative declaration for the Polyester Resins Manufacturing source category, asserting that there are no existing sources in the District or sources that emit above the RACT guidance (CTG) threshold limit for this source category. This is covered by the following CTGs:

  Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 03/84)

  Control of VOC Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 11/83)

Table 1
Existing District Rules Determined to Meet RACT

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
District Rules that are Approved in the California SIP					
Adhesives	Control Technique Guidelines for Miscellaneous Industrial Adhesives (EPA 453/R-08-005, 09/08); NESHAP Subpart FFFF, Misc. Organic Chemical Production and Processes (MON) (11/10/03)	Rule 235, Adhesives (10/11/12)	Minor	78 FR 53711 08/30/13, effective 10/29/13 (10/11/12)	Rule 235 meets RACT.
Architectural Coatings	National VOC Emission Standards for Architectural Coatings (40 CFR 59 Subpart D, 63 FR 176: 48848, 09/98)	Rule 218, Architectural Coatings (10/14/10)	Minor	76 FR 75795 12/05/11 , effective 02/03/12 (10/14/10)	Rule 218 (10/14/10) meets RACT. It meets Federal requirements for VOCs. It was updated to meet California's Suggested Control Measure (2007).
Automotive Refinishing	Reduction of Volatile Organic Compound Emissions from Automobile Refinishing (EPA-450/3-88-009, 10/88); National VOC Emission Standards for Automobile Refinish Coatings (40 CFR 59 Subpart B, 09/98)	Rule 234, Automotive Refinishing (10/14/10)	Minor	76 FR 75795 12/05/11, effective 02/03/12 (10/14/10)	Rule 234 (10/14/10) meets RACT. It meets Federal requirements for VOCs. It was updated to meet California's Suggested Control Measure (2005).
Boilers, Biomass	235	Rule 233, Biomass Boilers (06/14/12)	Major	78 FR 53249 08/29/13 (06/14/12)	Rule 233 meets RACT.
Boilers, Water Heaters ≥ 5 million Btu/hr	NOx Emissions from Process Heaters (EPA-453/R-93-034, 09/93); NOx Emissions from Utility Boilers (EPA-453/R-94-023, 03/94); NOx Emissions from Industrial / Commercial / Institutional Boilers (EPA-453/R-94-022, 03/94)	Rule 231, Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (10/09/97)	Minor	76 FR 67366 11/01/11, effective 01/03/12 (10/09/97)	Rule 231 (10/09/97) meets RACT. It meets the ACT.

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
Cutback Asphalt	Control of VOC from Use of Cutback Asphalt (EPA-450/2-77-037, 12/77)	Rule 217, Cutback and Emulsified Asphalt Paving Materials (10/19/93)	Minor	62 FR 23365 04/30/97 (10/19/93)	Rule 217 meets RACT.
Flat Wood Paneling Coatings	Control of Volatile Organic Emissions from Existing Stationary Sources for Factory Surface Coating of Flat Wood Paneling (EPA-450/2-78-032, 06/78); Control of Volatile Organic Emissions from Existing Stationary Sources Control Technique Guidelines for Flat Wood Paneling Coatings (EPA-453/R-06-004, 09/06)	Rule 238, Factory Coating of Flat Wood Paneling (10/14/10)	Minor	76 FR 71886 11/21/11, effective 01/20/12 (10/14/10)	Rule 238 (10/14/10) meets RACT. It was amended to meet the CTG.
Gas Turbines	NOx Emissions from Stationary Gas Turbines (EPA-453/R-93-007, 01/93)	Rule 250, Stationary Gas Turbines (10/17/94)	Minor and Major (non-CTG source)	60 FR 43713 08/23/95 (10/17/94)	Rule 250 meets RACT. It meets the ACT.It is consistent with the rules of other districts in the region.
Gasoline Bulk Plants and Terminals	Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, 12/77); Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 12/77); NESHAP Subparts CCCCCC, Gasoline Dispensing Facilities (Area Sources) (1/10/08), R, Gasoline Distribution (Stage 1) (12/14/94), BBBBBB, Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (Area Sources) (01/10/08)	Rule 215, Transfer of Gasoline into Tank Trucks, Trailers, and Railroad Tank Cars at Loading Facilities (06/19/97)	Minor	76 FR 5277 01/31/11 (06/19/97)	Rule 215 (06/19/97) meets RACT. Rule 215 meets the CTG.

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
Gasoline Service Stations (Storage Tanks)	Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations (11/75); Control of Volatile Organic Compound (VOC) Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/3-83-007, 12/83) ;Technical Guidance – Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities (EPA-450/3-91-022a, 11/91); Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 12/78)	Rule 213, Gasoline Transfer into Stationary Storage Containers (10/19/93)	Minor	62 FR 23365 04/30/97 (10/19/93)	Rules 213 (10/19/93) meets RACT. Rule 213 meets all current California requirements for this source category including recent rules for Phase I Enhanced Vapor Recovery system.
Graphic Arts	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VIII: Graphic Arts-Rotogravure and Flexography (EPA-450/2-78-033, 12/78); Control Technology Guidelines for Offset Lithographic Printing and Letterpress Printing (EPA-453/R-06-002, 09/06)	Rule 239, Graphic Arts Operations (10/11/12)	Minor	79 FR 14178 03/13/14 (10/11/12)	Rule 239 (10/11/12) meets RACT. It was recently amended to meet the CTG. It has recently been proposed for approval into the SIP by EPA on 03/13/14.
Metal Coil, Container, and Closure	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coatings of Cans, Coils, Paper, Fabric, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 05/77)	Rule 223, Metal Container Coating (10/06/94)	Minor	60 FR 2563 01/10/95 (10/06/94)	Rule 223 (10/06/94) meets RACT. It meets the CTG. It was SIP approved on 01/10/95. It is consistent with the rules of other districts in the region.

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
Metal Parts Coatings	Control of Volatile Organic Emissions from Existing Stationary Sources (EPA-450/2-78-015, 06/78); Control Technique Guidelines for Miscellaneous Metal and Plastic Parts Coatings (EPA 453/R-08-003, 09/08); NESHAP Subpart PPPP, Plastic Parts (4/19/04)	Rule 245, Surface Coating of Metal Parts and Products (08/20/09)	Minor	76 FR 67366 11/01/11, effective 01/03/12 (08/20/09)	Rule 245 (08/20/09) meets RACT. It was recently amended to meet the CTG.
Polyester Resin Operations	CARB Determination of RACT and Best Available Retrofit Control Technology (BARCT) for Polyester Resin Operations document (01/08/91); Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 03/84); Control of VOC Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 11/83); NESHAP Subpart FFFF, Misc. Organic Chemical Production and Processes (MON) (11/10/03)	Rule 243, Polyester Resin Operations (04/10/03)	Minor	76 FR 61057 10/03/11, effective 12/02/11 (04/10/03)	Rule 243 (04/10/03) meets RACT. It meets the CTG. It meets CARB's RACT/BARCT guidance (01/08/91).
Solvent Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning (EPA-450/2-77-022, 77/11); Control Techniques Guidelines for Industrial Cleaning Solvents (EPA-453/R-06-001, 09/06); Alternative Control Techniques Document – Industrial Cleaning Solvents (EPA-453/R-94-015, 1994/02); Halogenated Solvent Cleaners (EPA-450/3-89-030, 89/08); NESHAP Subpart T, Degreasing Organic Cleaners (12/2/94)	Rule 216, Organic Solvent Cleaning and Degreasing (12/11/03)	Minor	75 FR 24406 05/05/10 (12/11/03)	Rule 216 (12/11/03) meets RACT. It was SIP approved after the 2006 CTG (EPA-453/R-06-001, 09/06). The EPA and CARB provided recommendations for change (EPA's TSD (01/21/10), and e-mail (04/07/10)), but no actions needed to meet RACT.

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
Solvent Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning (EPA-450/2-77-022, 77/11); Control Techniques Guidelines for Industrial Cleaning Solvents (EPA-453/R-06-001, 09/06); Alternative Control Techniques Document – Industrial Cleaning Solvents (EPA-453/R-94-015, 1994/02); Halogenated Solvent Cleaners (EPA-450/3-89-030, 89/08); NESHAP Subpart T, Degreasing Organic Cleaners (12/2/94)	Rule 240, Surface Preparation and Cleanup (12/11/03)	Minor	79 FR 14178 03/13/14 (12/11/03)	Rule 240 (12/11/03) meets RACT. It meets the CTG. It has recently been proposed for approval into the SIP by EPA on 03/13/14.
Tanks	Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks (EP-450/2-77-036, 12/77); Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450-2/78-047, 12/78); Alternative Control Techniques Document – Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA-453/R-94-001, 01/94)	Rule 212, Storage of Organic Liquids (06/19/97)	Minor	74 FR 27714 06/11/09 (06/19/97)	Rule 212 (06/19/97) meets RACT. It meets all CTGs and ACTs. It was SIP approved on 06/11/09.
Wood Furniture Coatings	Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations (EPA-453/R-96-007, 04/96) ; NESHAP Subpart JJ, Wood Furniture (12/7/95)	Rule 236, Wood Products Coating Operations (10/14/10)	Minor	76 FR 71886 11/21/11, effective 01/20/12 (10/14/10)	Rule 236 (10/14/10) meets RACT. It was amended to meet the CTG.

Table 1. Existing District Rules That Have Been Determined to Meet RACT

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Analysis Used to Determine that the Rule Meets RACT
District Rules that are Under Current EPA Review for SIP Approval, or are to be Submitted by ARB					
Gasoline Service Stations (Transfer to Vehicle)	Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations (11/75); Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/3-83-007, 12/83); Technical Guidance – Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities (EPA-450/3-91-022a, 11/91); Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 12/78)	Rule 214, Transfer of Gasoline into Vehicle Fuel Tanks (02/21/13)	Minor	62 FR 23365 4/30/97 (10/19/93). The 02/21/13 amendment has not been approved.	Rule 214 (04/09/09) met RACT. It met the CTG. Rule 214 meets all current California requirements for this source category including recent rules for Phase II Enhanced Vapor Recovery system. It was submitted to EPA (09/15/09) for SIP approval and the District received comments that were addressed in the 02/21/13 amendment. The 02/21/13 amended Rule has not yet been submitted by CARB to EPA.
Surface Coating of Plastic Parts and Products	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings" [EPA 453/R-08-003], September 2008.	Rule 249, Surface Coating of Plastic Parts and Products (08/08/13)	Minor		District adopted new Rule 249 on 08/08/13 to address the CTG. Submitted to CARB, and awaiting CARB forwarding to EPA.

Table 2
Negative Declarations

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Source Categories with CTGs					
Aerospace Coatings	Control of Volatile Organic Compound (VOC) Emissions and MACT from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 12/97); Aerospace MACT (59 FR-29216, 06/06/94); National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart GG, Aerospace Manufacturing and Rework Facilities (03/27/98)		No Major or Minor exceeding CTG thresholds or that require District Permit		Negative declaration adopted 02/13/14 since the CTG applicability threshold is 25 tons/year for sources in moderate, serious, or severe non-attainment areas, and the potential VOC emissions from existing sources in the District are less than 25 tons/year.
Automobile and Light-duty Truck Assembly Coatings	Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings (EPA 453/R-08-006, 09/08); Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Primer-Surfacer and Topcoat Operations (EPA 453/R-08-002, 09/08). Also, Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coatings of Cans, Coils, Paper, Fabric, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 05/77)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Dry Cleaning (Petroleum)	Control of VOC Emissions from Large Petroleum Dry Cleaners (EPA-450/3-82-009, 09/82). New Source Performance Standards for Petroleum Dry Cleaners (40 CFR 60 Subpart JJJ, 10/00)	Rule 227, Petroleum Dry Cleaning Operations (02/05/91); rescinded 04/12/12	No Major or Minor exceeding CTG thresholds or that require District Permit		Negative declaration to be adopted. There are no sources for this category in the District. The previously existing Rule was rescinded. Rule 227 was not SIP approved and the District has no large petroleum dry cleaners that would be covered by the CTG for Large Petroleum Dry Cleaners, therefore the District does not need a RACT rule for this category. The NSPS for Petroleum Dry Cleaners, 40 CFR 60 Subpart JJJ exempts dry cleaners which have a capacity of less than 84 pounds per load. This 84 pound size will be considered the definition of “large” relative to the CTG.
Fiberglass Boat Manufacturing	Control Technique Guidelines for Fiberglass Boat Manufacturing Materials (EPA 453/R-08-004, 09/08)		None		Negative declaration to be adopted. There are no sources for this category in the District.
Flexible Package Printing	Control Technique Guidelines for Flexible Package Printing (EPA-453/R-06-003, 09/06)		None		
Large Appliances Surface Coatings	Control Technique Guidelines for Large Appliance Coatings (EPA 450/2-77-034, 12/77); Control Technique Guidelines for Large Appliance Coatings (EPA 453/R-07-004, 09/07); NESHAP Subpart NNNN, Large Appliances (7/23/02)		None		

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Magnet Wire	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating of Insulation of Magnet Wire (EPA-450/2-77-033, 12/77); Control of Volatile		None		Negative declaration to be adopted. There are no sources for this category in the District.
Metal Furniture Coatings	Control of Volatile Organic Emissions from Existing Stationary Sources (EPA-450/2-77-032, 12/77); Control Techniques Guidelines for Metal Furniture Coatings (EPA-453/R-07-005, 09/07); NESHAP Subpart RRRR, Metal Furniture (5/23/03)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.
Natural Gas / Gasoline Processing	Control of VOC Equipment Leaks from Natural Gas / Gasoline Processing Plants (EPA-450/2-83-007, 12/83)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.
Paper and Fabric	Control of Volatile Organic Emissions from Existing Stationary Sources – Volume II: Surface Coatings of Cans, Coils, Paper, Fabric, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 05/77)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.
Paper, Film, and Foil Coatings	Control Techniques Guidelines for Paper, Film, and Foil Coatings (EPA-453/R-07-003, 09/07)	230, Plastic Products and Materials – Paper Treating Operations (06/28/94); rescinded 4/12/12	None	59 FR 64336 (12/14/1994), for Rule 06/28/94.	Rule 230 was rescinded 4/12/12. The only source, Formica, is shutdown (06/29/07).
Pharmaceutical Products	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029, 12/78)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Polyester Resins Manufacturing	Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 03/84); Control of VOC Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 11/83); NESHAP Subpart FFFF, Misc. Organic Chemical Production and Processes (MON) (11/10/03)		None		Negative declaration to be adopted. There are no sources for this category in the District.
Refineries	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds (EPA-450/2-77-025, 10/77); Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 06/78)		None		Negative adopted 02/13/14. There are no sources for this category in the District.
Rubber Tire	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-030, 12/78)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.
Ships/Marine Coating	Control Technique Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating) (61 FR 44050, 08/27/96)); Alternative Control Technology Document – Surface Coating Operations at Shipbuilding and Ship Repair Facilities (EPA-453/R-94-032, 04/94); NESHAP Subpart II, Shipbuilding and Ship Repair (surface coating) (12/16/96)		None		Negative declaration adopted 02/13/14. There are no sources for this category in the District.

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Synthetic Organic Chemicals	Control of VOC Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, 12/84); Control of VOC Emissions from Reactor Processes and Distillation Operations in SOCMI (EPA-450/4-91-031, 08/93)		None		Negative declaration to be adopted. There are no sources for this category in the District.
Source Categories with ACT and Other RACT Guidance (not CTGs)					
Bakery Ovens	Alternative Control Technology Document – Bakery Ovens (EPA-453/R-92-017, 12/92)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Cement Kilns	NOx Emissions from Cement Manufacturing (EPA-453/R-94-004, 03/94)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Chemical Plants	Control Techniques for Fugitive VOC Emissions from Chemical Process Facilities (EPA-625/R-93-005, 03/94)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Ethylene Oxide	Alternative Control Technology Document – Ethylene Oxide Sterilization / Fumigation Operations (EPA-450/3-89-007, 03/89)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Glass Furnaces	NOx Emissions from Glass Manufacturing (EPA-453-R-94-037, 01/93)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Ink and Paint Manufacture	Control of VOC Emissions from Ink and Paint Manufacturing Processes (EPA-450/3-92-013, 04/92)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Iron and Steel	NOx Emissions from Iron and Steel Mills (EPA-453/R-94-065, 09/94)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Leather and Tanning	Air Emissions and Control Technology for Leather Tanning and Finishing Operations (EPA-453/R-93-025, 06/93)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.

Table 2. CTG/ACT Source Categories for Which a Negative Declaration Has Been Adopted or is Required

Source Category	RACT Guidance Document -- Control Technique Guidelines (CTG), Alternative Control Technology (ACT), and Others	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet RACT
Nitric and Adipic Acid	NOx Emissions from Nitric and Adipic Acid Manufacturing (EPA-453/3-91-026, 12/91)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Organic Waste Process Vents	Alternative Control Technology Document - Organic Waste Process Vents (EPA-450/3-91-007, 1990/12)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Pesticides	Control of VOC Emissions from the Application of Agricultural Pesticides (EPA-453/R-92-011, 03/93)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Plywood Veneer Dryers	Control Techniques for Organic Emissions from Plywood Veneer Dryers (EPA-450/3-83-012		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Polymeric Foam Product Manufacturing	Control of VOC Emissions from Polystyrene Foam Manufacturing (EPA-450/3-90-020, 09/90)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.
Wastewater	Control of VOC Emissions from Industrial Wastewater (EPA-453/D-93-056, 09/92)		None		ACT or Other RACT Guidance. There are no sources for this category in the District.

Table 3
Every Feasible Measure

Table 3. Every Feasible Measure (EFM)

Source Category	CARB -- Every Feasible Control Measure (EFM)	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet EFM
Adhesives	SMAQMD Rule 460 (11/30/00); SJUAPCD Rule 4653 (09/16/10); BAAQMD Reg. 8, Rule 51 (12/02/09); SCAQMD Rule 1168 (01/07/05); SDCAPCD Rule 67.21 (05/14/08); YSAQMD Rule R2-33 (05/14/08); CARB- Reasonably Available Control Technology (RACT) (1998)	Rule 235, Adhesives (10/11/12)	Minor	Approved 78 FR 53711 8/30/13, effective 10/29/13	Rule 235 emission reduction measures will be equal to equivalent measures in the rules of other districts in the region.
Aerospace Coatings	SCAQMD Rule 1124 (12/13/96); SDCAPCD Rule 67.9 0 (04/30/97)		No Major or Minor		There are no sources subject to this source category in the District.
Architectural Coatings	CARB Suggested Control Measure (SCM) (2007); SCAQMD Rule 1113 (07/13/07)	Rule 218, Architectural Coatings (10/14/10)	Minor	76 FR 75795 12/5/11, effective 2/3/12 (10/11/12)	Rule 218 considers the State emission reduction measures equal to the 2007 CARB SCM.
Automotive Refinishing	CARB Suggested Control Measure (SCM) (10/05); SCAQMD Rule 1151 (12/02/05)	Rule 234, Automotive Refinishing (10/14/10)	Minor		Rule 234 considers the State emission reduction measures equal to the 2005 CARB SCM.
Bakery Ovens	SMAQMD Rule 458 (09/05/96); SJUAPCD Rule 4693 (05/16/02); BAAQMD Reg. 8, Rule 42 (06/01/94); SCAQMD Rule 1153 (01/13/95); SDCAPCD Rule 67.24 (05/15/96)		None		There are no sources subject to this source category in the District.
Fugitive Emissions from Chemical Plants	BAAQMD Reg. 8, Rules 22 (06/01/94), 28 (06/15/94), 18 (01/07/98)		None		There are no sources subject to this source category in the District.
Fugitive Emissions from Oil and Gas Production	RACT Determination of Fugitive Emissions of Fugitive Emissions of VOCs from Oil and Gas Production and Processing; Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations (12/08/93)		None		There are no sources subject to this source category in the District.
Fugitive Emissions from Petroleum Refineries	BAAQMD Reg. 8, Rules 28 (06/15/94), 18 (01/07/98)		None		There are no sources subject to this source category in the District.

Table 3. Every Feasible Measure (EFM)

Source Category	CARB -- Every Feasible Control Measure (EFM)	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet EFM
Gasoline Terminals and Bulk Plants	SMAQMD Rules 446 (11/16/93), 447 (04/02/98); SJUAPCD Rules 4621 (12/20/07), 4623 (05/19/05); BAAQMD Reg. 8, Rules 33 (4/15/09), 39 (04/15/09), 5 (10/12/06); SCAQMD Rules 462 (05/14/99), 463 (05/06/08); SDCAPCD Rules 61.1 (07/26/00), 61.2 (07/26/00), 61.3 (10/16/03), 61.3.1 (03/01/06), 61.8 (01/13/87).1, 61.4.1 (03/26/08); YSAQMD Rules R2-13 (05/25/94), R2-21 (09/14/05)	Rule 215, Transfer of Gasoline into Tank Trucks, Trailers, and Railroad Tank Cars at Loading Facilities (06/19/97)	Minor	76 FR 5277 01/31/11 (06/19/97)	Rule 215 emission reduction measures are equal to equivalent measures in the rules of other districts in the region.
Graphic Arts, Lithographic and Letterpress Printing	SMAQMD Rule 450 (10/23/08); SJUAPCD Rule 4607 (12/08/08); BAAQMD Reg. 8, Rule 20 (11/19/08); SCAQMD Rules 1130 (10/8/99); SDCAPCD Rule 67.16 (05/15/96)	239, Graphic Arts Operations (10/11/12)	Minor	63 FR 63410 11/13/98 (02/13/97)	Rule 239 emission reduction measures will be revised to meet equivalent measures in the rules of other districts in the region. Awaiting EPA action on 10/11/12 amendment.
Industrial Boilers ≥ 5 million Btu/hr	SMAQMD Rule 411 (03/25/10); SJUAPCD Rules 4305 (08/21/03), 4306 (10/16/08); BAAQMD Reg. 9, Rule 7 (07/30/08); SDCAPCD Rules 69 (12/12/95),69.2 (09/27/94); YSAQMD Rule R2-27 (08/14/96); CARB - RACT and Best Available Retrofit Control Technology (BARCT) for Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (07/18/91)	231, Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (10/09/97)	Minor	76 FR 67366 11/1/11, effective 1/3/12 (10/09/97)	Rule 231 emission reduction measures are equal to equivalent measures in the rules of other districts in the region.
Large Water Heaters and Small Boilers < 2 million Btu/hr	SCAQMD Rule 1146.1 (5/13/94) and 1146.2 (05/05/06); SMAQMD Rule 411 (8/23/07) and 414 (8/1/96); SJUAPCD Rule 4307 (5/19/11) and 4308 (12/17/09); BAAQMD Reg. 9, Rule 6 (11/7/07) and Rule 7 (9/16/92); YSAQMD Rule 2.37 (4/8/09)	246, Natural Gas Fired Water Heaters (06/19/97)	Minor	76 FR 67366 11/1/11, effective 1/3/12 (06/19/97)	Rule 246 applies to natural gas water heater < 750,000 Btu/hr and is consistent with the rules of other districts in the region.
		Rule 247, Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters (10/10/13)	Minor		Rule 247 for all new boilers and water heaters within the heat input range of 75,000 to 5 million Btu/hr -- a SIP commitment by 2015 -- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan. Rule 247 amended on 02/13/14.

Table 3. Every Feasible Measure (EFM)

Source Category	CARB -- Every Feasible Control Measure (EFM)	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet EFM
Marine Coatings	SCAQMD Rule 1106 (01/13/95); NESHAP 60 FR 64330 (12/15/95)		None		There are no sources subject to this source category in the District.
Metal Parts and Products (Non-Architectural)	SMAQMD Rule 451 (09/25/2008); SJUAPCD Rule 4603 (09/17/09); BAAQMD Reg. 8, Rule 19 (10/16/02); SCAQMD Rule 1107 (01/06/06); SDCAPCD Rule 67.3 (04/9/03); YSAQMD Rule R2-25 (05/14/08)	245, Surface Coating of Metal Parts and Products (08/20/09)	Minor		Rule 245 is consistent with the rules of other districts in the region. It was recently amended to meet the Control Technique Guidelines (CTG).
Pleasure Craft Coating Operations	SCAQMD Rule 1106.1 (02/12/99)		None		There are no sources subject to this source category in the District.
Polyester Resin Operations	SMAQMD Rule 465 (09/25/08); SJUAPCD Rule 4684 (09/17/09); BAAQMD Reg. 8, Rule 50 (12/2/09); SCAQMD Rule 1162 (07/08/05); SDCAPCD Rule 67.12 (05/15/96); YSAQMD Rule R2-30 (05/14/08)	243, Polyester Resin Operations (04/10/03)	Minor		Rule 243 considers the State emission reduction measures equal to the 2007 CARB's RACT/BARCT.
Polymeric Foam Product Manufacturing	SJUAPCD Rule 4682 (09/20/07); SDCAPCD (05/15/96); SCAQMD Rule 1175 (09/07/07)		None		There are no sources subject to this source category in the District.
Portland Cement Kilns	SCAQMD Rule1112 (06/06/86)		None		There are no sources subject to this source category in the District.
Refinery Boilers	SCAQMD 1109 (08/05/88) BAAQMD Reg. 9 Rule10 (01/05/94)		None		There are no sources subject to this source category in the District.
Restaurants, Chain Driven Charbroilers	SJUAPCD Rule 4692 (9/17/09); SCAQMD Rule1138 (11/14/97)		Minor		There are no sources subject to this source category in the District.
Semiconductor Manufacturing	BAAQMD Reg. 8, Rule 30 (6/15/94); SCAQMD Rule 1164 (1/13/95); VCAPCD Rule 74.21(4/6/93)	Rule 244, Semiconductor Operations (02/09/95)	Minor	61 FR 38571 07/25/96 (02/09/95)	Rule 244 meets RACT. There is no available federal CTG guidance for this source category. The Rule was SIP approved on 07/25/96.

Table 3. Every Feasible Measure (EFM)

Source Category	CARB -- Every Feasible Control Measure (EFM)	PCAPCD Rule (Date Last Amended)	PCAPCD Sources	Most Recent SIP Approval	Actions Required to Meet EFM
Small Industrial Boilers (1 million Btu/hr to 5 million Btu/hr)	SMAQMD Rule 414 (08/23/07); SJUAPCD Rules 4307(10/16/08); 4308 (12/17/09)	Rule 247, Natural Gas-Fired Water Heaters, Small Boilers, and Process Heaters (10/10/13)	Minor		Rule 247 for all new boilers and water heaters within the heat input range of 75,000 to 5 million Btu/hr -- a SIP commitment by 2015 -- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan. Rule 247 amended on 02/13/14.
Solvent Cleaning	SMAQMD Rule 466 (09/25/08); SJUAPCD Rules 4663 (09/20/07), 4461 (09/20/07); BAAQMD Reg.8, Rule 16 (10/16/02); SCAQMD Rules 1122 (05/1/09), 1171 (05/1/09); SDCAPCD Rule 67.6.1 (05/23/07)	216, Organic Solvent Cleaning and Degreasing (12/11/03); 240, Surface Preparation and Cleanup (12/11/03)	Minor	75 FR 24406 05/05/10 (12/11/03)	Rule 216 emission reduction measures will be equal to equivalent measures in the rules of other districts in the region.
Surface Coating of Plastic Parts and Products	BAAQMD Reg. 8, Rule 31 (10/16/02); SCAQMD Rule 1145 (12/04/09)	Rule 249, Surface Coating of Plastic Parts and Products (08/08/13)	Minor		District adopted new Rule 249 to address this source category. Awaiting forwarding by ARB to EPA.

ATTACHMENT 1

RACT Evaluation of Existing District Rules

Attachment 1. RACT Evaluation of Existing District Rules

Adhesives

District Rule 235, ADHESIVES, was recently amended on 10/11/12 to meet the EPA's 2008 CTG and consideration of the rules of other districts in the region. As part of the recent adoption process it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 08/30/13.

Architectural Coatings

District Rule 218, ARCHITECTURAL COATINGS, was recently amended on 10/14/10 to meet CARB's Suggested Control Measure, which contains beyond-RACT VOC limits. As such its controls well-exceed the existing EPA guidance and are equally or more stringent than the rules of other districts in the region. As part of the recent adoption process it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 12/05/11. Note this category is not covered by a standing CTG.

Automotive Refinishing

District Rule 234, AUTOMOTIVE REFINISHING, was recently amended on 10/14/10 to meet CARB's Suggested Control Measure, which contains beyond-RACT VOC controls. As such, its controls well exceed the EPA CTG and are equally or more stringent than the rules of other districts in the region. As part of the recent adoption process it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 12/05/11.

Boilers, Biomass

District Rule 233, BIOMASS BOILERS, was recently amended on 06/14/12 to meet more stringent NOx emission levels currently achieved in practice. As such, it is equally or more stringent than any other District rule, and much more stringent than EPA ACT guidance. As part of the adoption process it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 06/14/12.

Boilers, Water Heaters > 5 MMBtu/hr

The District is not required to meet RACT for this source category because we do not have any major sources of this type. Nonetheless, for ozone attainment SIP planning, District Rule 231, INDUSTRIAL, INSTITUTIONAL, AND COMMERICAL BOILERS, STEAM GENERATORS, AND PROCESS HEATERS, was originally adopted on 10/17/94, last amended on 10/09/97, and incorporated into the SIP recently on 11/01/11. It is more stringent than EPA ACT guidance. It is identical to rules of other districts in the region--Yolo-Solano, El Dorado, and Feather River. The Sacramento Air Quality Management District has Rule 411 with more stringent NOx limits for gas-fired boilers. We will consider including lower limits in upcoming regional ozone attainment plan commitments.

Water Heaters, Small Boilers, and Process Heaters

For natural gas units between 0.075 - 5 MMBtu/hr, the District is not required to meet RACT for this source category because we do not have any major sources of this type. Nonetheless, for ozone attainment SIP planning, District Rule 247, NATURAL GAS FIRED WATER HEATERS, SMALL BOILERS, AND PROCESS HEATERS, was recently adopted on 10/10/13. It is consistent with some of the most stringent rules in the state.

Cutback Asphalt

District Rule 217, CUTBACK AND EMULSIFIED ASPHALT PAVING MATERIALS, was last amended on 10/19/93 and approved into the SIP by EPA on 04/30/97. Subsequent EPA comments, in a letter dated 10/10/06, on the District's 2006 RACT SIP indicate that Rule 217 meets the CTG, however recommends considering banning the use of cutback asphalt during the ozone season as done by several midwestern states, and replacing the use of cutback asphalt with emulsified asphalt as promoted by the CTG.

The South Coast Air Quality Management District (SCAQMD) has since concluded that, based on the definitions in their cutback asphalt Rule 1108, replacement of cutback asphalt with emulsified asphalt

would actually potentially increase VOC emissions. This is because cutback asphalt has a 0.5% organic compound limit, whereas emulsified asphalt has a 3% organic compound limit.

District Rule 217 has the same basic organic content limits as SCAQMD Rule 1108. For slow-cure, Rule 217 allows 0% of organic compounds that evaporate at less than 500˚F, less than the SCAQMD limit of 0.5%. For medium-cure, Rule 217 has an exemption that allows use only on days when the maximum temperature will not exceed 50˚F; however, 50˚F days do not occur during the ozone season. Use of fast-cure asphalt is prohibited at all times. Further, like SCAQMD, District Rule 217 limits emulsified asphalt to 3% organic compounds.

Thus, District Rule 217 meets RACT. The rule effectively prohibits the use of cutback asphalt containing volatile organics during the ozone season -- because during the ozone season only the use of slow-cure cutback asphalt is allowed. Banning the use of cutback asphalt would reduce VOC emissions only during periods outside of the ozone season.

Flat Wood Paneling Coatings

District Rule 238, FACTORY COATING OF FLAT WOOD PANELING, was recently amended on 10/14/10 to meet EPA's 2006 CTG and consideration of the rules of other districts in the region. As part of the adoption process, it was reviewed and approved by CARB, and reviewed and recently approved into the SIP by EPA on 11/21/11.

Gas Turbines

District Rule 250, STATIONARY GAS TURBINES, was adopted on 10/17/94 and SIP-approved on 08/23/95. It is applicable to gas turbines that are larger than 0.3 MW.

There are two existing gas turbine operations in the District: (1) a limited low-use, peaker, and (2) a baseline full load.

For limited low-use, peaker turbines, District Rule 250 NOx limits meet RACT--they are consistent with the rules of other districts in the region, and meet EPA ACT and other guidance:

- Roseville Electric operates two peaker single cycle natural gas/fuel oil fired turbines, each at 25 MW capacity. Water injection is used for NOx control. Operations began in 1987. District permits limit combined turbine operating hours to less than 900 unit-hours per year and 25 unit-hours per day. District permits limit NOx emissions to 42 ppmv @ 15% O_2 on natural gas and 62 ppmv @ 15% O_2 on fuel oil. These limits are consistent with District Rule 250, STATIONARY GAS TURBINES for the low use (< 877 hours/year per engine) category.

  Actual total combined annual engine operation for the last 3 years has ranged from 44 - 70 hours/year, significantly less than the allowable total of 900:

Calendar Year	Engine Operating Hours per Year		
	#1	#2	Total
2013			56.5
2012	41.8	28.1	69.9
2011	23.6	20.7	44.3

  Actual measured emissions during source testing conducted in year 2011, which is required by the District permit to be performed once every three years, demonstrated NOx emissions of 30.5 and 34.0 ppmv @ 15% O2 (corresponding to 15.94 and 19.69 lb/hr), respectively for Engines #1 and #2, meeting both District permit and Rule 250 limits.

  The engines run exclusively on natural gas; and will not ever run on fuel oil.

For baseline full load units, District Rule 250 NOx limits do not meet RACT. However, for the one operation of this type in the District, federally enforceable permit limits are used to satisfy RACT:

- Roseville Electric operates two combined cycle natural gas fired turbines (each at 60 MW, 80 MW maximum capacity with duct burners firing). Selective catalytic reducation and oxidation catalysts are used for NOx and CO control. Operations began in September 2007. They operate under an EPA reviewed and approved Title V permit. The federally enforceable permit limits NOx emission to 2 ppmv @ 15% O_2 on a 1-hour average, VOC at 2 ppmv @ 15% O_2 on a 1-hour average, and CO at 4 ppmv @ 15% O_2 on a 3-hour average. These levels are representative of Best Available Control Technology, and are significantly more stringent than EPA ACT or rules of other districts in the region for existing sources. The operation uses (as required by District permit) Continuous Emissions Monitoring System (CEMS) to measure NOx and CO; and is required to conduct annual source testing to confirm NOx and CO plant emissions and relative accuracy of the CEMS.

Gasoline Bulk Plants and Terminals

District Rule 215, TRANSFER OF GASOLINE INTO TANK TRUCKS, TRAILERS, AND TAILROAD TANK CARS AT LOADING FACILITIES, was last amended on 06/19/97, and recently approved in the SIP by EPA on 01/31/11. It meets EPA CTG and NESHAPs, and is consistent with the rules of other districts in the region.

Gasoline Service Stations

District Rule 213, GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS, meets CARB Phase I Enhanced Vapor Recovery requirements, which are fully consistent with EPA CTG and the rules of other districts in the region. It was included in the SIP by EPA on 10/19/93.

District Rule 214, TRANSFER OF GASOLINE INTO VEHICLE FUEL TANKS, meets CARB Phase II Enhanced Vapor Recovery requirements, which are fully consistent with EPA CTG and the rules of other districts in the region. It was recently amended on 02/21/13, and has been reviewed and approved by CARB and forwarded to EPA. It is in process of being submitted by CARB to EPA for inclusion into the SIP.

Graphic Arts

District Rule 239, GRAPHIC ARTS, was recently amended on 10/11/12 to meet the EPA's 2006 CTG and consideration of the rules of other districts in the region. As part of the recent adoption process it was reviewed and approved by CARB, and reviewed and approved by EPA. It was recently proposed for approval into the SIP by EPA on 03/13/14.

Internal Combustion Engines (Stationary)

The District is not required to meet RACT for this source category because we do not have any major sources of this type. Nonetheless, for ozone attainment SIP planning, District Rule 242, STATIONARY INTERNAL COMBUSTION ENGINES, was adopted on 04/10/03, which limits NOx for stationary engines greater than 50 HP, and has been recently submitted for SIP approval.

Metal Coil, Container, and Closure

District Rule 223, METAL CONTAINER COATING, was last amended on 10/06/94 and SIP approved on 01/10/95. Rule 223 meets the EPA CTG. There is one District source that operates under this rule -- Capital Drum, which coats reconditioned drums. For the drum coating VOC limits, Rule 223 is consistent with those of San Joaquin Valley Air Pollution Control District, and Sacramento Air Quality Management District. EPA has commented that the VOC limit for the end-sealing compound category does not meet RACT. The District has confirmed that this product-type is not used at Capital Drum, or any other location in the District that we are aware of.

Metal Parts Coating

District Rule 245, SURFACE COATING OF METAL PARTS AND PRODUCTS, was recently amended on 08/20/09 to meet the EPA's 2008 CTG and consideration of the rules of other districts in the region. As part of the recent adoption process, it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 11/01/11.

Plastic Parts Coating

District Rule 249, SURFACE COATING OF PLASTIC PARTS AND PRODUCTS, was recently adopted on 08/08/13. It was based on EPAs 2008 CTG and considering the rules of other districts in the region. It has been reviewed and approved by CARB. It has been reviewed and commented on by EPA. CARB will forward the rule to EPA for inclusion into the SIP.

Polyester Resin Operations

District Rule 243, POLYESTER RESIN OPERATIONS, was adopted in 04/10/03, and recently incorporated into the SIP on 10/03/11. It meets EPA CTG and CARB BARCT guidance.

Solvent Cleaning

District Rule 240, SURFACE PREPARATION AND CLEANUP, and District Rule 216, ORGANIC SOLVENT CLEANING AND DEGREASING OPERATIONS, control VOCs from the use of solvents for cleaning, where not otherwise addressed in separate source category prohibitory rules. The District rules all meet the EPA 2006 CTG, with a VOC content limit of 50 g/L; many individual source category rules have a solvent cleaning VOC content limit of 25 g/L..

District Rule 240 was recently proposed for approval into the SIP by EPA on 03/13/14.

District Rule 240 and 216 do not meet the more stringent VOC limit of 25 g/L which have been recently adopted by two regional districts (Sacramento and Yolo-Solano) as part of their ozone attainment plan commitments. The District will consider moving to the 25 g/L limit as part of our upcoming regional ozone attainment planning. The District does not consider the general solvent cleaners VOC limit of 25 g/L to currently be cost effective or have a significant beneficial impact on reducing local ozone.

Tanks

District Rule 212, STORAGE OF ORGANIC LIQUIDS, was last amended on 06/19/97, and incorporated into the SIP on 06/11/09. It meets all EPA CTG and ACTs, and is consistent with the rules of other districts in the region.

Wood Furniture Coating

District Rule 236, WOOD PRODUCTS COATING OPERATIONS, was recently amended on 10/14/10 to be consistent with other District rules, EPA guidance, and consideration of the rules of other districts in the region. As part of the recent adoption process, it was reviewed and approved by CARB, and reviewed and approved into the SIP by EPA on 11/21/11.

EPA MACT/NESHAPS

In our RACT analyses, the District has considered recent EPA Maximum Achievable Control Technology (MACT) rulemakings concerning the control of hazardous air pollutants (HAPs) from applicable District source categories. These include Autobody Refinishing (Subpart HHHHHH), Dry Cleaning (Subpart M), Miscellaneous Metal Parts and Products (Subpart MMMM), Metal Can (Subpart KKKK), and Plastic Parts (Subpart PPPP). Work practices appropriate for the control of both VOC and HAPs have been directly considered, and incorporated as possible. Because many HAPs are exempt VOCs for ozone regulation (i.e., are not photochemically reactive and do not produce ozone) and many VOCs are not HAPs, it is not possible to directly compare or utilize MACT HAP limits with RACT VOC limits. Further, MACT HAP limits are fully and directly evaluated and considered in case-by-case individual source permits.