

**EL DORADO COUNTY
AIR QUALITY MANAGEMENT DISTRICT**

**REASONABLY AVAILABLE CONTROL
TECHNOLOGY (RACT) STATE
IMPLEMENTATION PLAN (SIP) UPDATE
ANALYSIS STAFF REPORT**

DECEMBER 15, 2006

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INTRODUCTION

El Dorado County is located in northern California, bordering Sacramento County to the west and the State of Nevada on the east. Air quality attainment planning is under the jurisdiction of the El Dorado County Air Quality Management District (District). Elevations range from 1,000 feet in the western portion of the County to over 9,000 feet in the mountains of the Sierras. El Dorado County is divided into two different air basins: 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 the adjacent Sacramento Valley Air Basin (SVAB) and the lower elevations of the MCAB have summers that are hot and dry with temperatures usually in the 90s, which 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 El Dorado County in the MCAB are included in the Sacramento Federal Ozone Non-Attainment Area (SFNA), which has been designated as "serious" non-attainment for the 8-hour ozone National Ambient Air Quality Standard (NAAQS). Before the U.S. Environmental Protection Agency (U.S. EPA) posted new 8-hour ozone designations and non-attainment classifications in June 2004, the SFNA was a "severe" non-attainment area for the 1-hour ozone NAAQS. Although the U.S. EPA revoked the 1-hour ozone NAAQS, the SFNA still remains subject to control measure commitments that applied under the 1-hour ozone NAAQS. Therefore, the District is responsible for implementing emission standards and other requirements mandated by the Federal Clean Air Act.

REASON FOR THIS ANALYSIS

Sections 182(b)(2) and 182(f) of the Federal Clean Air Act require ozone non-attainment areas to implement Reasonably Available Control Technology (RACT) for sources that are subject to Control Techniques Guideline (CTG) documents issued by U.S. EPA and for "Major Sources" of Volatile Organic Compounds (VOCs) and Oxides of Nitrogen (NO_x), which are ozone precursors. RACT requirements are included in the Clean Air Act to assure that significant source categories at Major Sources are controlled to a "reasonable" extent, but not necessarily to Best Available Control Technology (BACT) or Maximum Achievable Control Technology" (MACT) levels which are expected of new sources.

U.S. EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of technology (i.e., devices, systems, process modification, or other apparatus or techniques that reduce air pollution) that is reasonably available considering technological and economic feasibility.

According to the U.S. EPA's *Final Rule to Implement the 8-Hour Ozone NAAQS* (70 FR 71612, November 29, 2005) areas classified as moderate non-attainment or higher must submit a demonstration that their current rules fulfill 8-hour ozone RACT for all CTG categories and all Major, non-CTG Sources as a revision to their State Implementation Plan (SIP). States can demonstrate that RACT is being met with either a new RACT determination or a certification that previously required RACT controls represent RACT for 8-hour ozone. Areas may rely on previous analyses written for 1-hour ozone plans and U.S. EPA guidance documents. The RACT SIP submittal is in addition to the area's 8-hour Ozone Attainment Demonstration Plan, which will also be a SIP submittal.

ACTION REQUESTED BY U.S. EPA

On March 9, 2006 and April 4, 2006, Andrew Steckel, U.S. EPA Office Rulemaking Chief, sent request letters to the California Air Resources Board (CARB). The letters concern District

requirements and outlined a possible RACT SIP submittal strategy to determine whether RACT requirements have been met. District activities performed as a part of this analysis are as follows:

Part 1 Identify all District rules subject to the U.S. EPA Control Techniques Guidelines (CTG) source categories within the District and determine if they meet RACT standards.

Part 2 Identify all CTG categories for which there are no facilities in the District, and submit Negative Declarations stating that there are no such facilities.

Part 3 List District rules and their SIP approval status for all applicable RACT categories.

Part 4 Summarize the above processes that the District used to: (1) determine that the District regulations fulfill RACT, (2) determine Negative Declarations needed for certain CTG categories, and (3) determine which District rules need to be submitted to U.S. EPA as revision to the SIP.

The District was requested to prepare a complete RACT SIP update analysis, covering Major Sources, non-Major CTG Sources, and non-CTG Major Sources. In addition, the District is required to implement an 8-hour Ozone Demonstration Plan no later than the beginning of the first ozone season or portion thereof that occurs 30 months after the above submittal date. This would be March 15, 2009. Since El Dorado County has a full year ozone season, the required implementation date for the District will be January 1, 2009. Note that the implementation date for any source operating under a Title V permit, pursuant to 40 CFR Part 70, would be governed by the requirements of that permit. This staff report relates to the RACT SIP update analysis submittal.

ANALYSIS

District Planning History

To improve the air quality in El Dorado County and move the region towards attainment of the NAAQS, the District has prepared and adopted several air quality attainment plans since 1991. The District has also adopted over 100 new rules and amendments to meet the commitments in these attainment plans. The air quality in El Dorado County has improved over the past several years as the District has adopted air quality plans and regulations. In a continuation of the District's strategy for achieving the NAAQS, the District is working with other air districts in SFNA to submit an 8-hour ozone attainment demonstration plan to U.S. EPA by June 15, 2007, as specified by federal requirements.

Part 1 – Identify all District rules subject to the U.S. EPA CTG source categories within the District and determine if they meet RACT standards.

This District analysis compared the current Prohibitory Rules (Regulation 2 in the District Rule Book) to current U.S. EPA guidance standards for emission control measure. The purpose of this work was to: (1) determine if the District had an adopted rule for the source category, (2) determine if the rule's control measures satisfied the requirements of the U.S. EPA's control measure standard, and (3) determine if a new rule will need to be adopted for existing emission sources. The standards compared were Control Techniques Guidelines (CTG) and Alternate Control Techniques (ACT) Guidance. The ultimate purpose of this study is the determination by the District of whether the District has existing adopted rules that meet or exceed the standards in the current CTGs and ACTs.

To determine if District rules fulfill RACT requirements, Staff used the following guidelines:

- District rules that have been SIP-approved by U.S. EPA are considered to meet RACT requirements because U.S. EPA evaluated the rules to determine if they fulfill RACT established by CTGs, (ACTs) and U.S. EPA guidelines and policies. Therefore, any EPA SIP-approved District rules are said to have met RACT requirements.
- As a non-attainment area for the California ozone standard, the District is required by California Health and Safety Code (CH&SC) Sections 40914(a)(2) and 40920.6(a) to implement “All Feasible Control Measures” (AFCM) and “Best Available Retrofit Control Technology” (BARCT). In general, AFCM and BARCT requirements are more stringent than those previously established by CTGs and ACTs. Therefore, District rules that implemented AFCM and BARCT are said to fulfill RACT requirements.
- All CTG emission source categories were compared against existing adopted District rules and a finding was made regarding whether the adopted rule met or exceeded the applicable CTG RACT requirements. All ACTs were evaluated to determine whether Major Sources exist in the source category and if so, whether or not a District rule satisfying ACT guidelines has been adopted.

Table A, provided as an Appendix to this report lists all U.S. EPA source categories requested, both Major and non-Major, and the corresponding CTGs and ACTs, with details of each category. All the adopted rules have been found to satisfactorily meet RACT requirements.

Table B contains the major source in the District and that the source meets RACT for all emission units.

Table C shows that there are rule categories listed in the April 4, 2006 U.S. EPA letter for which no sources currently exist in the District. The absence of sources of these categories was determined by Staff, based on a study of the District permit base, public notices, and personal knowledge (See Part 2, below which discusses Negative Declarations) Staff also noted that the District has new non-Major Sources in one CTG category (Metal Parts and Products) that has no rule at this time. The District RACT SIP submittal process will include the requirement that the appropriate rule be written, adopted and approved subsequent to this RACT SIP study, but no later than the El Dorado County RACT implementation date of January 1, 2009.

Table D provides an overview of adopted District Rules and amendments, and Applicable SIP Approval dates.

Major Sources:

The following Table B lists the Major Source that is currently in the District.

Table B - Major Sources – El Dorado Air Quality Management District					
Source	Source Category	Pollutant	Rule No.	Rule Title	Location / Comments
Sierra Pacific Industries (Title V)	Boilers, Steam Generators and Process Heaters	NO _x	232	Biomass Boilers	Camino
Sierra Pacific Industries (Title V)	Boilers, Steam Generators and Process Heaters	VOC	234	VOC RACT Rule-Sierra Pacific Industries	Camino

The Major Stationary Source, including Major non-CTG Sources have adopted District rules that satisfy RACT requirements.

Part 2 - Negative Declaration (Negative Declaration) for use with 8-hour Ozone Reasonably Available Control Technology (RACT) State Implementation Plan Certification

Background

Due to the designation of portions of El Dorado County as “moderate” or above non-attainment for ozone, Sections 182(b)(2) and 182(f) of the Federal CAA require the District to submit a revision to the State Implementation Plan (SIP) to implement RACT for each category of Volatile Organic Compound (VOC) or Nitrogen Oxide (NOx) sources covered by a CTG document and for any Major Stationary Source not covered by a CTG document. The Mountain Counties Air Basin portions of the District are part of the Sacramento Federal Ozone Non-Attainment Area (SFNA) which is designated as “serious” non-attainment for ozone.

RACT requires that all non-attainment areas classified as “moderate” or above have RACT in place for source categories covered by a Control Techniques Guideline (CTG) document and for Major Sources that are not subject to a CTG (i.e. a “Major non-CTG Source”). A “Major Source” of VOCs or NOx in El Dorado County is defined as an emission source having a potential to emit of 25 tons of the pollutant per year. The District must adopt the control measures for a source category if it has a source of emissions located within the non-attainment area that is subject to a CTG. Alternatively, if the finding is made that there are no existing sources that emit the designated pollutants in its area subject to a RACT requirement, the District may make a negative declaration to this effect and consequently the requirement to adopt a rule for those sources is not applicable. This process is called “Negative Declaration” .

The District is required to submit Negative Declarations for all CTG categories for which there are no sources above the CTG recommended threshold, even if such negative declarations were made for an earlier SIP. This is necessary since there may be sources in the non-attainment area that previously did not exist. Also, if the boundaries of the non-attainment area have expanded, there may be sources in the new portion of the non-attainment area which should not be overlooked.

The District must also submit a Negative Declaration to certify that there are no Major non-CTG Sources in the non-attainment area.

The Negative Declaration must go through the same public review requirements as any other SIP submittal.

Negative Declaration Findings and Staff Recommendations

The District Staff reviewed permit databases, SIC codes, other source data and the emission inventory for its Federal Clean Air Plan, and has determined that there are no sources for the CTG categories listed below in Table C.

Staff has determined that there are no existing sources of emissions in these eighteen (18) CTG categories and the Negative Declarations should be submitted to U.S. EPA for approval. Staff will submit these eighteen (18) Negative Declarations for public comment, and District Board consideration and approval. If approved by the District Board the Negative Declarations will be submitted to CARB for forwarding to U.S. EPA as requested revisions to the State Implementation Plan.

Table C District Negative Declaration Submittal Requirements		
	Rule Title	Pollutant
1	Aerospace Coating	VOC
2	Automotive Coating (Assembly Plant)	VOC
3	Large Appliance Coating	VOC
4	Magnet Wire Coating	VOC
5	Metal Coil, Container and Closure Coating	VOC
6	Metal Furniture Coating	VOC
7	Paper and Fabric Coating	VOC
8	Ship Coating	VOC
9	Wood Coating (Flat Wood Paneling)	VOC
10	Wood Furniture	VOC
11	Natural Gas/Gasoline Plants	VOC
12	Refineries	VOC
13	Synthetic Organic Chemical Manufacturing	VOC
14	Tanks	VOC
15	Petroleum Dry Cleaning	VOC
16	Pharmaceutical Products	VOC
17	Polyester Resin Manufacturing	VOC
18	Rubber Tires	VOC

Part 3 - SIP Status - Identify all District rules subject to the U.S. EPA CTG source categories within the District and determine if they meet RACT standards.

The current status of each of the District prohibitory rules that previously were adopted for CTG/ACT source categories was reviewed and is displayed in the following table. This SIP status study was necessary in order to determine which rules, if any, needed to be submitted or re-submitted for SIP approval by U.S. EPA.

Staff examined the adoption dates of the above rules, and the dates of the latest amendments, if any. Then the date of SIP approval was compared with the rule adoption histories.

Table D - District Rule History (VOC and NOx) and SIP Approval Status:

Table D lists the adoption history of seven (7) District rules for CTG categories and ACT categories at major sources, and their SIP approval status. They are listed by rule number. The right hand column indicates if the District must re-submit any existing rule that was amended after the latest date of SIP approval, in order to ensure that the review will be based upon the most current amendment of that rule. Staff recommends that these SIP submittals be found exempt from the California Environmental Quality Act (CEQA). The proposed submittals are exempt from CEQA as per Title 14, California Code of Regulations, Chapter 3, Article 19, Section 15308, Actions by Regulatory Agencies for the Protection of the Environment.

Table D - District Rule History (VOC and NOx) and SIP Approval Status							
Rule No.	Rule Title	Pollutant Controlled	CTG Source ?	Date Adopted	Date Last Amended	SIP Approval - FR Citation	New SIP Approval Required?
224	Cutback and Emulsified Asphalt Paving Materials	VOC	Yes	9/16/91	6/6/94	8/21/95 - 60 FR 43383	N
225	Organic Solvent Cleaning and Degreasing Operations	VOC	Yes	9/27/94	Not Amended	8/21/95 - 60 FR 43383	N
231	Graphic Arts Operations	VOC	Yes	9/27/94	Not Amended	7/11/97 62 FR 37136	N
232	Biomass Boilers	NOx	No	10/18/94	9/25/01	10/14/03 - 68 FR 59121	N
234	VOC RACT Rule-Sierra Pacific Industries	VOC	No	4/25/95	Not Amended	9/12/95 - 60 FR 47273	N
238	Gasoline Transfer and Dispensing	VOC	Yes	3/27/01	Not Amended	8/27/01 - 66 FR 44974	N
244	Organic Liquid Loading and Transport Vessels	VOC	Yes	3/27/01	9/25/01	7/8/02 - 67 FR 45066	N

Part 4 – Summary and Conclusions

New RACT Rules to Be Adopted - Details of the process Staff used to evaluate the Applicable SIP status of the District's rules that satisfy Major Source RACT requirements are described in **Part 1**, above. The Staff comparison of all current District rules to the standards of applicable CTG's and ACT's found that the District has adopted rules corresponding to RACT source categories and that satisfy RACT requirements. One CTG category, Metal Parts and Products, have non-Major emission source(s), but no District Rule has been adopted. Staff recommends that the Board direct the development and adoption of the rule to limit VOC emissions from the coating of metal parts and products. Although there are no Major Sources in this source category, there are non-Major Sources of VOC that would be subject to the new rule establishing RACT requirements. The rules should be implemented by January 1, 2009, and should be adopted as a revision to the SIP and submitted to U.S. EPA.

Negative Declarations - (Part 2) Based on Staff review of District sources, the Negative Declaration of no existing Major Stationary VOC Sources may be made for eighteen (18) additional VOC RACT source categories. In addition, the Staff analysis found that there were no Major Stationary Sources, including Major non-CTG Sources, for which District rules satisfying RACT had not been adopted. Staff recommends that the District Board make the declaration that no existing Stationary Sources exist for VOC in El Dorado County in the eighteen (18) specified CTG source categories and that no Major non-CTG Sources exist for which RACT measures have not been adopted.. Staff further recommends that these SIP submittals be found exempt from the California Environmental Quality Act (CEQA) per Title 14, California Code of Regulations, Chapter 3, Article 19, Section 15308, Actions by Regulatory Agencies for the Protection of the Environment.

SIP Status – (Part 3) Rule adoption, amendment, and SIP approval history for District prohibitory rules was reviewed and analyzed. The seven (7) rules are already SIP-approved rules.

APPENDIX

Table A - Rule Categories as Listed in U.S. EPA Letter to CARB, 4/4/06

List of CTGS and RACT Analysis

Category	EPA Documents	
General	CTGs	RACT analysis
Coating & Solvents		
Surface Coating	No CTG or major source	Not applicable
Adhesives and Sealants	No CTG or major source	Not applicable
Aerospace	<p>(P4) Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations CTG & MACT (See 59 FR 29216, 6/6/1994); CTG (Final), EPA-453/R-97-004, 12/97). http://www.epa.gov/ttn/oarpg/t1/memoranda/ctg.pdf</p>	No sources which meet CTG applicability
Architectural Coatings	No CTG or major source	Not applicable
Automobile Coating	<p>(#3) 1. 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, 5/77, NTIS PB-272-445), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s0227/reference/ref_02c04s0227_Jan1995.pdf</p>	No sources which meet CTG applicability (objects surface coated in automotive and light duty truck assembly plants)
Graphic Arts	<p>(#19) 1. Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography (EPA-450/2-78-033, 12/78, NTIS PB 292-490), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s091/reference/ref_03c04s091_1995.pdf</p>	Rule 231 Graphic Arts Operations requires either low-VOC inks or add-on controls with a control efficiency of 95% and a collection efficiency of 70%. The CTG presents either water-borne or high solids inks, or add-on controls. The rule meets RACT.
Large Appliances	<p>(#9) Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances, EPA-450/2-77-034, NTIS PB-278-259), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s0224/reference/ref_02c04s0224_1995.pdf</p>	No sources which meet CTG applicability
Magnet Wire	<p>(#8) 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, NTIS PB-278-258), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s0223/reference/ref_01c04s0223_1995.pdf</p>	No sources which meet CTG applicability

Metal Coil, Container, & Closure	See automobile coating.	No sources which meet CTG applicability
Metal Furniture	(#7) Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture (EPA-450/2-77-032, 12/77, NTIS PB-278-257), CTG http://www.epa.gov/ttn/chief/old/ap42/ch04/s0224/reference/ref_01c04s0224_1995.pdf .	No sources which meet CTG applicability
Metal Parts & Products	(#14) Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015, 6/78, NTIS PB-286-157), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s0224/reference/ref_03c04s0224_1995.pdf	Existing Sources meet CTG applicability-RACT rule to be promulgated.
Paper & Fabric	See automobile coating.	No sources which meet CTG applicability
Plastic Parts	No CTG or major source	Not applicable
Ships	(P3) (A16) 1. ACT Document: Surface Coating Operations at Shipbuilding and Ship Repair Facilities (EPA-453/R-94-032, 4/94, NTIS PB-94-181-864). The ACT was superseded by the Shipbuilding CTG which was issued in 1996 http://www.epa.gov/ttn/oarpg/t1/memoranda/ship-1.zip http://www.epa.gov/ttn/oarpg/t1/memoranda/ship-2.zip (P3) 2. CTG, see 61 FR 44050, 8/27/96. FR notice: http://www.epa.gov/ttn/oarpg/t1/memoranda/shipctg.zip	No sources which meet CTG applicability
Solvent Cleaning	(#4) 1. Control of Volatile Organic Emissions from Solvent Metal Cleaning, (EPA-450/2-77-022, 11/77, NTIS PB-274-557), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s06reference/ref_02c04s06_1995.pdf	Rule 225-Organic Solvent Cleaning and Degreasing requires covers, draining facilities and work practices that minimize solvent evaporation or an emission control system which has 85% control efficiency. The CTG presents similar machine design specifications, alternative control devices and work practices. The rule meets RACT.
Traffic Markings	No CTG or major source	Not applicable
Wood Coating: Factory Surface of Flat Wood Paneling	(#15) Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface of Flat Wood Paneling (EPA-450/2-78-032, 6/78, NTIS PB 286-199), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s0225/reference/ref_01c04s0225_1995.pdf	No sources which meet CTG applicability

Wood Furniture	(P2) Control of VOC Emissions from Wood Furniture Manufacturing Operations CTG-MACT draft MACT our 5-94; Final CTG, EPA-453/R-96-007, 4/96, NTIS PB-96-178-769), Also see 61 FR 25223 and 61 FR 50823, 9/27/96.	No sources which meet CTG applicability (potential emissions of greater than 25 tons/year)
Petroleum	CTG	
Gasoline Plants	(#10) Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, 12/77, NTIS PB-276-722), CTG.	Rule 244-Organic Liquid Loading and Transport Vessels requires a CARB certified or District approved vapor recovery/disposal system which has a recovery efficiency of 99% or 0.08 lb of non-methane vapor emitted per 1000 gallons transferred. The CTG presents submerged filling and vapor balance system. This rule meets RACT.
Natural Gas/Gasoline	(#26) Control of VOC Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/2-83-007, 12/83, NTIS PB-84-161-520), CTG.	No sources which meet CTG applicability
Refineries	(#5) 1. Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds, (EPA-450/2-77-025, 10/77, NTIS PB-275-662), CTG. (#16) 2. Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 6/78, NTIS PB-286-158), CTG.	No sources which meet CTG applicability
Service Stations	(#1) 1. Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations, (11/75), CTG.	Rule 238-Gasoline Transferring and Dispensing requires a CARB certified vapor recovery system with a recovery efficiency of 95% or 0.15 lb gasoline vapor emitted per 1000 gallons. The CTG requires 90% control. This rule meets RACT.
Synthetic Organic Chemical	(#28) 1. Control of VOC Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, 12/84, NTIS PB-85-164-275), CTG. (P1) 2. Control of VOC Emissions from Reactor Processes and Distillation Operations in SOCM I (EPA-450/4-91-031, 11/15/93, NTIS PB-92-180-009), CTG.	No sources which meet CTG applicability
Tanks	(#11) 1. Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks (EPA-450/2-77-036, 12/77, NTIS PB-276-749), CTG. (#20) 2. Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450-2/78-047, 12/78, NTIS PB-290-579), CTG. www.epa.gov/clariton/clhtml/pubtitle.html	No sources which meet CTG applicability (vessels larger than 150,000 liters)

Tank Trucks	(#6) 1. Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 12/77, NTIS PB-275-060), CTG. . (#22) 2. Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 12/78, NTIS PB-290-568), CTG. .	Rule 244-Organic Liquid Loading and Transport Vessels requires a CARB certified or District approved vapor recovery/disposal system which has a recovery efficiency of 99% or 0.08 lb of non-methane vapor emitted per 1000 gallons transferred. The CTG presents submerged filling and vapor balance system. This rule meets RACT.
Combustion	ACT	
Boilers, Steam Generators, Process Heaters (NO _x)	Major source: Sierra Pacific Industries (N3) 1. ACT Document -- NO _x Emissions from Process Heaters (Revised) (EPA-453/R-93-034, 9/93). http://www.epa.gov/ttn/catc/dir1/procheat.pdf (N5) 2. ACT Document -- NO _x Emissions from Utility Boilers (EPA-453/R-94-023, 3/94). http://www.epa.gov/ttn/chief/old/ap42/ch01/s01/reference/ref27_c01s01_1998.pdf (N7) 3. ACT Document -- NO _x Emissions from Industrial/Commercial/Institutional (ICI) Boilers (EPA-453/R-94-022, 3/94). http://www.epa.gov/ttn/catc/dir1/icboiler.pdf	Rule 232-Biomass Boilers requires a NO _x limit of 115 ppmv corrected to 12% CO ₂ or 50% reduction efficiency. This limit is identical to PCAPCD Rule 233 for similar type specialized industrial boilers. This rule meets RACT.
Boilers, Steam Generators, Process Heaters (VOC)	Major source: Sierra Pacific Industries	Rule 234-VOC RACT Rule-Sierra Pacific Industries requires a VOC limit of 150 ppmv for boilers exceeding the calendar year average of 50,000 lb/hr steam. This was determined by the "RACT Determination for Michigan-California Lumber Company Technical Support Documentation" prepared by Radian for EPA-Region IX in December 1993. The analysis is still appropriate.
Cement Kilns	No CTG or major source	Not applicable
Gas Turbines	No CTG or major source	Not applicable
Glass Furnaces	No CTG or major source	Not applicable
Internal Combustion Engines	No CTG or major source	Not applicable
Iron and Steel	No CTG or major source	Not applicable
Municipal Waste Combustion	No CTG or major source	Not applicable
NO _x Rules	No CTG or major source	Not applicable
Other	CTG	

Cutback Asphalt	(#12) Control of VOC from Use of Cutback Asphalt (EPA-450/2-77-037, NTIS PB 278-185), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch04/s05/reference/ref_03c04s05_1995.pdf	Rule 224-Cutback and Emulsified Asphalt Paving Materials prohibits the use of rapid cure cutback asphalt, medium cure cutback asphalt, and low cure cutback asphalt which contains more than 0.5% organic compounds which evaporate at 500F or lower. Also prohibited is emulsified asphalt that contains more than 3% organic compounds that evaporate at 500F or lower. The CTG as clarified by EPA's "Bluebook" limits solvent content to 7% for all applications or 3-12% depending on application. The rule meets RACT.
Bakeries	No CTG or major source	Not applicable
Dry Cleaning	(#24) Control of VOC Emissions from Large Petroleum Dry Cleaners, EPA-450/3-82-009 9/82, NTIS PB-83-124-875), CTG	No sources which meet CTG applicability (facility which consumes 123,000 liters/year solvent or more)
Fertilizer	No CTG or major source	Not applicable
Ink and Paint Manufacture	No CTG or major source	Not applicable
Leather Tanning	No CTG or major source	Not applicable
Nitric and Adipic Acid	No CTG or major source	Not applicable
Pesticides	No CTG or major source	Not applicable
Pharmaceutical Products	(#17) Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029, 1278, NTIS PB-290-580), CTG. http://www.epa.gov/ttn/chief/old/ap42/ch06/s10/reference/ref_01c06s10_1995.pdf	No sources which meet CTG applicability
Polyester Resin	(#25) 1. Control of VOC Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 11/83, NTIS PB-84-134-600), CTG. http://www.epa.gov/clariton/clhtml/pubtitle.html (#27) 2. Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 3/84, NTIS PB-84-189-372), CTG. http://www.epa.gov/clariton/clhtml/pubtitle.html	No sources which meet CTG applicability
Rubber Tires	(#18) Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-030, 12/78, NTIS PB-290-557), CTG. www.epa.gov/clariton/clhtml/pubtitle.html	No sources which meet CTG applicability
Sulfuric Acid	No CTG or major source	Not applicable
Wastewater	No CTG or major source	Not applicable