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REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) STATE IMPLEMENTATION PLAN (SIP)

September 13, 2006

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Yolo Solano Air Quality Management District RACT SIP Analysis

I. INTRODUCTION

The Yolo-Solano Air Quality Management District (District) consists of the County of Yolo, plus the northeast portion of Solano County, and encompasses the jurisdictions of Woodland, West Sacramento, Davis, Winters, Vacaville, and Rio Vista. The District is part of the "Sacramento Metro" area, as defined in the Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards final rule (69 Federal Register, 23858, April 30, 2004). The "Sacramento Metro" nonattainment area consists of the District plus Sacramento County, the western portions of Placer and El Dorado Counties and the southern portion of Sutter County. The region's hot, dry summers are conducive to ozone formation, and the fact that the region is at the southern end of a valley means that pollutants are not always quickly blown out of the area. The District is considered part of the Sacramento Valley Air Basin (SVAB).

The Sacramento Metro area is currently designated as a "serious" nonattainment for the 8-hour ozone National Ambient Air Quality Standards (NAAQS). Prior to the United States Environmental Protection Agency's (EPA's) implementation of the 8-hour ozone standard, the Sacramento Metro area was also classified as a "severe" nonattainment area for the one-hour ozone NAAQS. Although EPA revoked the 1-hour ozone NAAQS, the District is still required to meet certain related requirements mandated by the federal Clean Air Act. The Sacramento Metro area has also been referred to as the Sacramento Federal Nonattainment Area (SFNA) for ozone in the past.

According to EPA's Final Rule to Implement the 8-Hour Ozone NAAQS (70 FR 71612, November 29, 2005), areas classified as "moderate" nonattainment or higher must submit a demonstration that their current rules fulfill 8-hour ozone Reasonably Available Control Technology (RACT) for all Control Techniques Guidelines (CTG) categories and all major non-CTG sources as a revision to their State Implementation Plans (SIPs). Such demonstrations can be made with either a new RACT determination or a certification that previously required RACT controls represent RACT for the 8-hour ozone standard.

Areas may rely on previous analyses prepared for the one-hour ozone plans and EPA guidance documents. The RACT SIP submittal is in addition to the area's 8-hour ozone attainment demonstration plan, which is also a SIP submittal. The RACT SIP must be submitted to EPA by September 15, 2006.

II. DEFINITIONS

For clarity, the following terminology used in discussion of control measure and technology requirements in this staff report are defined below.

- Best Available Control Technology (BACT): The most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for given regulated air pollutants and processes. BACT is a requirement of New Source Review (NSR) and Prevention of Significant Deterioration (PSD).
- Best Available Retrofit Control Technology (BARCT): An emission limitation that applies to existing sources and is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source (California Health and Safety Code (CH&SC) Section 40406).
- Best Available Control Measure (BACM): A term used to describe the "best" measures (according to federal EPA guidance) for controlling small or dispersed sources of particulate matter and other emissions from sources such as roadway dust, woodstoves, and open burning.
- Reasonably Available Control Technology (RACT): Devices, systems, process
 modifications, or other apparatus or techniques that are reasonably available,
 taking into account the necessity of imposing such controls in order to attain and
 maintain a national ambient air quality standard; the social, environmental, and
 economic impact of such controls; and alternative means of providing for
 attainment and maintenance of such a standard. These control techniques, which
 are defined in EPA guidelines for limiting emissions from existing sources in
 nonattainment areas, are adopted and implemented for nonattainment areas by
 state analysis.
- Reasonably Available Control Measures (RACM): A broadly defined term referring to technologies and other measures that can be used to control pollution. They include Reasonably Available Control Technology and other measures.

III. FEDERAL PLANNING REQUIREMENTS

The federal Clean Air Act Amendments (CAAA) of 1990 give the states primary responsibility for achieving the NAAQS. The NAAQS are set by the EPA as the maximum concentrations in the atmosphere for specific air contaminants to protect public health and welfare.

The principal mechanism at the state and local level for complying with the CAAA is the SIP. A SIP outlines the programs, actions, and commitments a state will carry out to implement its responsibilities under the CAAA.

The EPA must approve all SIPs. Once approved by the EPA, a SIP is a legally binding document under both state and federal law. Since the District is included in

the Sacramento Metro area for ozone, the District works with other air districts in the greater Sacramento area to prepare the nonattainment area's portion of the SIP.

The District has prepared several air quality planning documents to meet state and federal clean air mandates, either by itself or in conjunction with the other air districts in the Sacramento Metro area. The most important of these are Regional Ozone Attainment Plans and other related documents, such as the Rate Of Progress (ROP) plans. These documents outline the District's long-range strategy for meeting federal standards for criteria air pollutants. Once approved by EPA, these documents become components of the California SIP. The last major plan prepared by the districts of the Sacramento Metro Area was the 1994 Sacramento Area Regional Ozone Attainment Plan. This Plan satisfied requirements of the CAAA and the California Clean Air Act of 1988 pertaining to attainment of the federal and state one-hour ozone standards.

The 1994 plan has been periodically updated and revised through the adoption of "Milestone Demonstrations". These milestone demonstrations are prepared at intervals to assess the nonattainment area's progress toward attainment of the ozone standard. As part of this assessment, the districts commit to assessing all potential control strategies, including stationary and area source rules. Milestone Reports were prepared for the years 1996, 1999, and 2002.

Section 182(b)(2) and 182(f) of the federal Clean Air Act require ozone nonattainment areas to implement RACT for sources that are subject to CTGs issued by EPA and for "major sources" of volatile organic compounds (VOC) and oxides of nitrogen (NOx), which are ozone precursors. 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; September 17, 1979). RACT requirements are included in the Clean Air Act to assure that significant source categories at major sources of ozone precursor emissions are controlled to a controlled to a "reasonable" extent, but not necessarily to BACT or "maximum achievable control technology" (MACT) levels expected of new sources.

IV. 8-HOUR OZONE RACT SIP ANALYSIS

A letter from EPA, Region IX (March 9, 2006) outlined an acceptable RACT SIP submittal framework (See Reference 1). The main points in this letter are quoted below.

 Describe efforts to identify all source categories within the District requiring RACT, including sources covered by an EPA CTG document and major non-CTG sources.

- For all categories needing RACT, list the state/local regulation that implements RACT. It may also be helpful to list the date EPA approved these regulations as fulfilling RACT.
- Describe the basis for concluding that the regulations fulfill RACT. Documents useful in establishing RACT include CTGs, Alternative Control Technique (ACT) guidance, MACT standards, New Source Performance Standards (NSPS), California Suggested Control Measures (SCM) and RACT/BARCT determinations, regulations adopted in other Districts, and guidance and rules developed by other state and local agencies.
- Submit negative declarations where there are no facilities (major or minor) within the District subject to a CTG.

This RACT SIP analysis covers all of the points listed above.

V. IDENTIFICATION OF SOURCE CATEGORIES SUBJECT TO RACT

1. CTG Sources

The EPA has issued CTGs showing RACT for existing facilities that emit significant quantities of air pollutants. Emissions sources covered by CTGs are referred to as CTG sources. EPA Region IX staff has sent a list of source categories and CTGs to the various state and regional air districts for the RACT SIP analysis (See Reference 2). District staff took the source category list and, for those source categories with a CTG, determined whether there were sources in the District that would be subject to the CTG. This list of CTG categories with applicable sources in the District is shown below:

- Automobile Coating
- Graphic Arts
- Metal Parts and Products
- Solvent Cleaning
- Bulk Gas Plants
- External Floating Roof Tanks Petroleum Liquid Storage
- Service Stations
- Synthetic Organic Chemical
- Tank Trucks
- Industrial Commercial Boilers
- Stationary Gas Turbines
- Stationary Reciprocating Internal Combustion Engines
- Cutback Asphalt
- Perchloroethylene Dry Cleaning Systems
- Agricultural Pesticides
- Nitric and Adipic Acid Manufacturing Plants

2. Major, non-CTG Sources

Sources that are not subject to CTGs, but for which RACT may still be required, are referred to as non-CTG sources. For purposes of this project, District staff considered only those non-CTG sources that have a potential to emit of 25 tons or more per year of either NOx or VOC. Twenty-five tons per year is the District's current definition of a "major source" as provided in District Rule 3.4 – New Source Review. There is one major source in the District that is not subject to a CTG. This source is Woodland Biomass Power Ltd.

VI. REGULATIONS IMPLEMENTING RACT

The main method of implementing RACT for CTG sources is the adoption of District rules. To make the determination that District rules meet RACT, the following criteria were used:

• District rules that have been approved by EPA are considered as fulfilling RACT requirements at the time of approval because EPA has to evaluate the rules to determine if they fulfill EPA RACT established by CTGs, ACT documents, and EPA guidelines and policies. Therefore, any EPA SIP-approved District rule can be shown to have met RACT requirements at the rule's approval date. Since RACT may change as technology changes over time, rules that have been approved by EPA some years ago must be shown to currently meet RACT.

To show that all SIP-approved rules meet RACT, the rules analyzed by the District were separated into two groups. The first group consists of rules approved by EPA after January 1, 2000. These rules have been recently analyzed by EPA, and would implement the latest control technology to meet RACT. These rules are designated in Table E as meeting RACT through "Recent EPA Approval". For rules approved prior to 2000, District staff evaluated whether the rule requirements were similar to current control technology. This was done by comparing the rule to the appropriate rules in other districts located in the same nonattainment area. If the rule provisions were found to be similar to current control technology used by other similar districts in our nonattainment area, a conclusion was made that the rule meets RACT. These rules are designated in Table E as meeting RACT through "Current Technology Evaluation". The only CTG category that was found to have a SIP-approved rule that did not meet RACT was the "Solvent Cleaning" category. Currently, this category is regulated under several other SIP-approved District rules. To correct this deficiency, the District is committing to amending our solvent-cleaning rule(s) and submitting the rule(s) to EPA for approval into the SIP.

 As a nonattainment area for the California ozone standard, the District is required by California Health and Safety Code (CH&SC) Section 40914(a)(2) and Section 40920.6(a) to implement "all feasible control measures" (AFCM) and BARCT, respectively. In general, AFCMs and BARCT requirements are more stringent than those established by CTGs and ACTs, which were implemented in the past by EPA.

- In order to satisfy requirements of the California Clean Air Act, the District prepares a Triennial Assessment and Plan Update. The last Triennial Plan was adopted by the District Board in 2005. An "All Feasible Measures" determination was made in this plan that reflects the District's ongoing efforts to review and adopt all emission reduction measures throughout the State that are feasible for the District. For stationary sources, the District committed to studying a number of measures and also committed to strengthening District Rule 2.21 Organic Liquid Storage and Transfer. Rule 2.21 has been amended in accordance with the commitment in the Triennial Plan, and has been submitted to EPA for approval. Copies of all draft and proposed rules and all notices of workshops and hearings are sent to EPA Region 9 on an ongoing basis.
- The District's Rule 3.4 New Source Review, specifies requirements for new, replacement, modified or relocated emissions units in the District. It requires that such units be constructed using BACT if they may emit certain increased amounts of ROG or NOx over a set threshold. BACT is an emission limitation based on the maximum degree of emission reduction (considering energy, environmental, and economic impacts) achievable through application of production processes and available methods, systems, and techniques. BACT does not permit emissions in excess of those allowed under any applicable federal Clean Air Act provision. BACT requirements in California are also widely recognized to exceed RACT.

VII. BASIS FOR CONCLUDING THAT RACT HAS BEEN MET

1. CTG/ACT Sources

Table A at the end of this document provides a list of CTG sources from the EPA letter dated April 4, 2006 with matching District rules that have been adopted and approved by the EPA. The table shows the date of rule adoption, the date of the last rule amendment, if any, the Federal Register approval citation, and the basis for certifying that the rule meets RACT. As discussed in Section VI, rules that have been approved by the EPA after January 1, 2000 are considered to have met RACT. Rules approved by EPA prior to 2000 were compared to the appropriate CTG and also to appropriate rules from other air districts in the nonattainment area. The only CTG category for which sources exist in the District that was found to have a SIP-approved rule that did not meet RACT was the "Solvent Cleaning" category. Currently, this category is regulated under several SIP-approved District rules, but some VOC limits may not meet RACT. To correct this deficiency, the District is committing to amending our solvent-cleaning rule(s) and to submit the rule(s) to EPA for approval into the SIP.

Table B lists CTG source categories for which there are applicable District rules, but these rules have not been federally approved. For these cases, Table B makes a

separate RACT determination. Only two rules that have been adopted for CTG sources have not been federally approved. These are Rule 9.7 – Perchloroethylene Dry Cleaning Operations, and Rule 2.39 – Wood Products Coating Operations. For Rule 9.7, perchloroethylene has been found to be an exempt compound according to District Rule 1.1 – General Provisions and Definitions, and consequently is not applicable to the 8-Hour ozone RACT-SIP analysis. For Rule 2.39, the District has no sources greater than 25 tons in this source category, and consequently no RACT determination is necessary.

Table C lists CTG source categories and CTGs from the April 4, 2006 EPA letter for which there are no applicable District rules. For each of these CTG source categories, District staff determined whether there are sources in the District that would be subject to these CTGs. This was done through a search of the District's current permits. If no source exists in the District subject to a CTG, no RACT determination is necessary. When sources were identified as being subject to one of these CTGs for which there is no District rule, Table C makes a RACT determination. These determinations are elaborated upon below:

- Ink and Paint Manufacture Control of VOC from Ink and Paint Manufacturing: Two sources exist in the District that would fall under this ACT category (Flint Ink North America Corporation and Triangle Digital Inx Co.). However, neither of these sources are major sources, so no RACT determination is necessary for this ACT category.
- Nitric and Adipic Manufacturing Plants: One source exists in the District (Agrium U.S. Incorporated) that would be in this ACT category. Agrium is a major source, and so a RACT determination is necessary. Although District staff believes that RACT is met through the source's permit conditions (the permit limits the source to three pounds of NOx for every ton of acid produced) the District is committing to adopting a rule for this source category that meets RACT, and submitting the rule to EPA for approval into the SIP.
- Agricultural Pesticides Control of VOC from the Application of Agricultural Pesticides: This source is regulated by the State of California and not by the District, so a RACT determination is not necessary. There are no known agricultural sources in the District that use more than 25 tons of pesticides in a given year.
- Batch Processes One source (Alza Corporation) in the District would fall under this ACT category. Batch processes at this source are regulated under District Rule 2.35 – Pharmaceutical Manufacturing. However, this source is not a major source, and so no RACT determination is necessary for this ACT category.

Table D presents all of the District VOC and/or NOx rules that were evaluated by staff for the RACT SIP. Given for each rule is a determination as to whether there is a corresponding CTG category, the adoption date or last amendment date of the rule,

the Federal Register citation for EPA approval, where applicable, and the corresponding Federal Register publication date.

Table E presents summaries of the RACT evaluations for those District rules covered by a CTG or ACT. Table E does not include District rules for which there are no corresponding CTGs or ACTs. Included in Table E is the basis for concluding that each District rule evaluated for RACT meets or exceeds RACT. As discussed in Section VI, rules approved by EPA after January 1, 2000 are considered to fulfill RACT. Rules approved prior to 2000 have been reviewed by District staff and found to have requirements similar to the applicable ACT/CTG or to have requirements similar to current rule technology in other District in our nonattainment area. It is therefore concluded that RACT is met for these source categories. The one exception to this is the solvent cleaning category, for which the District rule may contain some VOC limits that do not meet RACT. As explained above, the District is committing to amending its solvent cleaning rule(s) to meet RACT and will submit the rule(s) to EPA for approval into the SIP.

2. Major Non-CTG Sources

All major source facilities (the District's current major source threshold under Rule 3.4 – New Source Review is a potential-to-emit of 25 tons per year of NOx or VOC) are listed in Table F. The table contains the Facility ID number, the facility name and a general description of the facility's activities. The table also denotes whether the processes at the major source are in a CTG category. Of the ten "major source" facilities within the District, only two are not in a CTG category. These are Woodland Biomass Power Ltd., and Premier Industries, Inc. These two sources are regulated by their permit conditions, and there are no rules regulating the major emissions from these sources. Also, Agrium U.S. Inc. is a major source that falls under the Nitric and Adipic Acid Manufacturing Plants ACT category. This source is also regulated by permit and the District has no rule covering emissions at this source.

For all three major sources for which there are no rules, the District is committing to adopting rules meeting RACT and submitting these rules to EPA for approval into the SIP.

VIII. NEGATIVE DECLARATION FOR CTG'S FOR WHICH THERE ARE NO SOURCES

For the several CTGs for which there are no equivalent District rules, the District can adopt a "negative declaration" for these source categories if there are no sources in the District that would be subject to these CTG's. The EPA, in a letter dated May 25, 2006 (See Reference 3), stated that "Alternatively, the local agency may declare that there are no sources in its area subject to a RACT requirement, and then the requirement to adopt a rule for those sources is no longer applicable". Table C of this document identifies the CTG categories for which a RACT determination is not necessary because no sources exist in the District that would be regulated under

these CTG's. Moreover, the District does not anticipate these sources in the future. This constitutes the District's negative declarations for the 2006 RACT SIP.

IX. CONCLUSION

Based on the foregoing, District staff makes the following findings:

- All non-major CTG source categories that exist in the District are controlled by District rules meeting RACT with the exception of the Solvent Cleaning category and the Wood Furniture category. Per section 110k(4) of the Clean Air Act, the District can submit this plan revision, and the Administrator may approve it, based on a commitment to adopt specific enforceable measures up to one year after the date of approval of the plan revision. The District is committing to submit rules meeting RACT for these two source categories to EPA for approval into the SIP within one year of approval of this plan revision.
- For CTG categories for which there are no District rules, there are either no sources in the District subject to these CTG categories, sources exist but they are not major and are not required to show RACT under an ACT, or the category is regulated by a State agency. The one exception to this is the Nitric and Adipic Acid Manufacturing Plant category, for which there is a major source in the District, but the source is not controlled by a District rule. Per section 110k(4) of the Clean Air Act, the District can submit this plan revision, and the Administrator may approve it, based on a commitment to adopt specific enforceable measures up to one year after the date of approval of the plan revision. The District is committing to submit rules meeting RACT for this source category to EPA for approval into the SIP within one year of approval of this plan revision.
- For major sources, all are regulated by District rules meeting RACT with the exception of Agrium U.S. Inc., Premier Industries, Inc., and Woodland Biomass Power Ltd. Per section 110k(4) of the Clean Air Act, the District can submit this plan revision, and the Administrator may approve it, based on a commitment to adopt specific enforceable measures up to one year after the date of approval of the plan revision. The District is committing to submit rules meeting RACT for these source categories to EPA for approval into the SIP within one year of approval of this plan revision

X. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The 2006 RACT SIP Revision is an evaluation of current District air pollution rules and will not result in new or revised District regulations or any physical change in the environment. This project qualifies for a categorical exemption under CEQA (CEQA Guidelines Section 15307, Action by Regulatory Agency for Protection of Natural Resources).

References:

- 1. March 9, 2006 EPA letter signed by Andy Steckel. Subject: RACT SIPs
- 2. April 4, 2006 EPA letter signed by Andy Steckel. Subject: RACT SIPs
- 3. May 25, 2006 EPA letter signed by Andy Steckel. Subject: Sample Language for Negative Declaration for use with 8-hour Ozone Reasonably Available Control Technology State Implementation Plan (RACT SIP) Certification.

Table A
Source Categories, CTGs, and Federally Approved District Rules

CTG Source Category	CTG/ACT Reference Document	YSAQMD Rule	Date Adopted/ Last Amended	FR Citation	Still RACT? Basis for RACT
Automobile Coating	Automobile Refinishing (EPA 450 3-88-009)	2.26 – Motor Vehicle & Mobile Equipment Coating	8/13/1997	61 FR 18962	Yes. Rule 2.26 implements low-VOC technology. VOC limits equal to or below EDCAPCD and PCAPCD rules.
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, NTIS PB 292-490)	2.29 - Graphic Arts Printing Operations	8/13/1997	63 FR 44792	Yes. Rule 2.29 implements low-VOC technology. VOC limits equal to or below EDCAPCD and PCAPCD rules.
	Offset Lithographic Printing (EPA 453 R- 94-054)	2.29 - Graphic Arts Printing Operations	8/13/1997	63 FR 44792	Yes. Rule 2.29 implements low-VOC technology. VOC limits equal to or below EDCAPCD and PCAPCD rules.
Metal Furniture	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	2.25 - Metal Parts and Products Coating Operations	8/13/1997	61 FR 5288	Yes. Rule 2.25 implements low-VOC technology. VOC limits equal to or below SMAQMD rule.
Metal Parts & Products Solvent	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. Control of Volatile	2.25 - Metal Parts and Products Coating Operations	8/13/1997 8/13/1997	61 FR 5288	Yes. Rule 2.25 implements low-VOC technology. VOC limits equal to or below SMAQMD rule.

CTG Source Category	CTG/ACT Reference Document	YSAQMD Rule	Date Adopted/ Last Amended	FR Citation	Still RACT? Basis for RACT
Cleaning	Organic Emissions from Solvent Metal Cleaning, (EPA-450/2- 77-022, 11/77, NTIS PB-274-557), CTG.	Surface Preparation and Cleanup		15922	category currently controlled under a variety of District coatings rules. District will adopt a solvent-cleaning rule by 2009 that will meet RACT and submit the rule to EPA for approval into the SIP.
Bulk Gas Plants	Control of Volatile Organic Emissions From Bulk Gasoline Plants (EPA-450/2-77- 035, 12/77, NTIS PB- 276-722), CTG	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
External Floating Roof Tanks, Petroleum Liquid Storage	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.	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453 R-94-001	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
Fixed Roof Tanks, Storage of Petroleum Liquids	Control of Volatile Organic Emissions from Storage of Petroleum Liquds in Fixed Roof Tanks (EPA-450/2-77-036, 12/77, NTIS PB-276- 749) Organic Liquid Storage (EPA 453 R- 94-001	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
Natural Gas/Gasoline Processing Plants, Equipment Leaks	Control of VOC Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/2-83-077, 12/83, NTIS PB-84- 161-520), CTG	2.23 – Fugitive Hydrocarbo n Emissions	8/13/1997	64 FR 66393	Yes. Technology standards and leak threshold equivalent to counterpart SMAQMD Rule 446.
Service Stations	Design Criteria for Stage I Vapor Control Systems - Gasoline	2.22 - Gasoline Dispensing	6/12/2002	68 FR 3190	Yes. Approved post-2000 by EPA.

CTG Source Category	CTG/ACT Reference Document	YSAQMD Rule	Date Adopted/ Last Amended	FR Citation	Still RACT? Basis for RACT
	Service Stations, (11/75), CTG.	Facilities			
	Stage II Gasoline Dispensing Facilities (EPA 450 3-91-022a)	2.22 - Gasoline Dispensing Facilities	6/12/2002	68 FR 3190	Yes. Approved post-2000 by EPA.
Synthetic Organic Chemical	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.	2.35 - Pharmaceuti cal Manufacturi ng Operations	8/13/1997	62 FR 8172	Yes. Technology required in Rule 2.35 is equal to or more stringent than requirements of equivalent SMAQMD rule.
	Control of VOC Emissions from Reactor Processes and Distillation Operations in SOCMI (EPA-450/4-91-031,	2.35 - Pharmaceuti cal Manufacturi ng Operations	8/13/1997	62 FR 8172	Yes. Technology required in Rule 2.35 is equal to or more stringent than requirements of equivalent SMAQMD rule.
	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2- 78- 029, 1278, NTIS PB-290-580), CTG.	2.35 - Pharmaceuti cal Manufacturi ng Operations	8/13/1997	62 FR 8172	Yes. Technology required in Rule 2.35 is equal to or more stringent than requirements of equivalent SMAQMD rule.
Tank Trucks	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 12/77, NTIS PB-275- 060), CTG.	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
	Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 12/78, NTIS PB-290- 568), CTG.	2.21 - Organic Liquid Storage and Transfer	6/12/2002	71 FR 5172	Yes. Approved post-2000 by EPA.
Industrial Commercial Boilers	Industrial Commercial Boilers (EPA 453 R- 93-034)	2.27 – Industrial, Institutional, and Commercial boilers, Steam	8/14/1996	62 FR 32691	Yes. Limits in Rule 2.27 are equal to equivalent rules in PCAPCD and EDCAPCD. Limits are also more stringent

CTG Source Category	CTG/ACT Reference Document	YSAQMD Rule	Date Adopted/ Last Amended	FR Citation	Still RACT? Basis for RACT
		Generators, and Process Heaters			than applicable ACT.
Stationary Gas Turbines	Stationary Gas Turbines (EPA 453 R- 93-007)	2.34 – Stationary Gas Turbines	7/13/1994	63 FR 46892	Yes. Limits in Rule 2.34 is equal to or more stringent than requirements of equivalent SMAQMD and PCAPCD rules.
Stationary Reciprocating Internal Combustion Engines	Stationary Reciprocating IC Engines (EPA 453 R- 93-032	2.32 – Stationary Internal Combustion Engines	10/10/2001	67 FR 3816	Yes. Rule approved post-2000 by EPA.
Cutback Asphalt	Control of VOC from Use of Cutback Asphalt (EPA-450/2- 77-037, NTIS PB 278 - 185), CTG	2.28 – Cutback and Emulsified Asphalts	5/25/1994	61 FR 4215	Yes. Limits in Rule 2.28 is equal to or more stringent than requirements of equivalent rules in other districts in the nonattainment area.

Table B
Source Categories, CTGs, and District Rules That Have Not Been Federally Approved

CTG Source Category	CTG/ACT Reference Document	YSAQMD Rule	Date Adopted	Date Last Amended	RACT Analysis
Perchloroethy lene Dry Cleaning Systems	Control of Volatile Organic Emissions from Perchloroethylen e Dry Cleaning Systems (EPA- 450/2-78-050, 12/78, NTIS PB- 290-613)	9.7 – Perchloroeth ylene Dry Cleaning Operations	3/23/1994	11/13/1998	Perchloroethyl ene has been found to be an exempt compound per District Rule 1.1.
Wood Furniture	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),	2.39 - Wood Products Coating Operations	2/10/1999		The CTG for this category contains a 25 tons per year applicability threshold for marginal, serious, and severe nonattainment areas. No sources that emit over 25 tons of VOC exist in the District, so there are no sources subject to this CTG, and no RACT determination is necessary for this source category.

Table C – Negative Declaration for Source Categories and CTG List for Which There are No Applicable District Rules

CTG Source Category			RACT Analysis
Aerospace	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations CTG & MACT (See 59 FR 29216, 6/6/1994); CTG (Final)	No	N/A
Ships	Shipbuilding and Ship Repair Operations (Surface Coating) (61 FR 44050, 8.27/96)	No	N/A
Metal Coil Container and Closure	Metal Coil Control of Volatile Organic Emissions Container and from Existing Stationary Sources –		N/A
Magnet Wire			N/A
Natural Gas/Gasoline Processing Plants, Equipment Leaks	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	N/A
Refineries	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds, (EPA-450/2-77-025, 10/77, NTIS PB-275-662), CTG.	No	N/A
	Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 6/78, NTIS PB- 286-158), CTG.	No	N/A
Paper and Fabric	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.	No	N/A
Dry Cleaning	Control of VOC Emissions from Large Petroleum Dry Cleaners, EPA- 450/3-82-009 9/82, NTIS PB-83-124- 875), CTG.	No	N/A
Rubber Tires	Control of Volatile Organic Emissions from Manufacture of	No	N/A

CTG Source Category	Category		RACT Analysis
	Pneumatic Rubber Tires (EPA- 450/2-78-030, 12/78, NTIS PB-290- 557), CTG.		
Large Appliances, Surface Coating			N/A
Wood Coating	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.	No	N/A
Synthetic Organic Chemical	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	No	N/A
Polyester Resin	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.	No	N/A
	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.	No	N/A

Table D - District Rules Evaluated for RACT SIP

District Rule	Rule Name	CTG Source	Adoption Date of Federally Approved Version	Federal Register Rule Approval
2.13	Organic Solvents	Yes	5/25/94	61 FR 18962
2.14	Architectural Coatings	No	11/14/01	69 FR 34
2.16	Fuel Burning Heat or Power Generators	Yes		44 FR 5664
2.20	Orchard Heaters	No		44 FR 5663
2.21	Organic Liquid Storage and Transfer	Yes	9/14/05	71 FR 5172
2.22	Gasoline Dispensing Facilities	Yes	6/12/02	68 FR 3190
2.23	Fugitive Hydrocarbon Emissions	Yes	3/23/94	64 FR 66393
2.24	Solvent Cleaning Operations (Degreasing)	Yes	11/14/90	59 FR 64130
2.25	Metal Parts and Products Coating Operations	Yes	4/27/94	61 FR 5288
2.26	Motor Vehicle and Mobile Equipment Coating Operations	Yes	11/9/94	61 FR 18962
2.27	Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters	Yes	8/14/96	62 FR 32691
2.28	Cutback and Emulsified Asphalts	Yes	5/25/94	61 FR 4215
2.29	Graphic Arts Printing Operations	Yes	5/25/94	63 FR 44792
2.30	Polyester Resin Operations	Yes	4/14/99	64 FR 39037
2.31	Surface Preparation and Cleanup	Yes	4/27/94	64 FR 15922

2.32	Stationary Internal Combustion Engines	Yes	10/10/01	67 FR 3816
2.33	Adhesive Operations	Yes	9/14/94	61 FR 5288
2.34	Stationary Gas Turbines	Yes	7/13/94	63 FR 46892
2.35	Pharmaceutical Manufacturing Operations	Yes	9/14/94	62 FR 8172
2.37	Natural Gas-Fired Residential water Heaters	Yes	11/9/94	64 FR 57991
2.38	Municipal Solid Waste Landfills	No	3/12/97	Rule 2.38 is not SIP approved. However, Rule 2.38 adopts by reference the Emission Guidelines for Municipal Solid Waste Landfills as promulgated by the United States Environmental Protection Agency at 40 CFR part 60 Subpart Cc, which would meet RACT.
2.39	Wood Products Coating Operations	Yes	2/10/99	No sources in the Wood Furniture Manufacturing category with VOC emissions of 25 tons or more, so no sources subject to the CTG and no RACT determination is necessary.
2.40	Wood Burning Appliances	No	12/8/04	

Table E – RACT SIP Summary (EPA-Approved Rules)

District Rule	Rule Name	RACT Basis
2.13	Organic Solvents	EPA Approval 4/30/1996
		Current Technology Evaluation
2.16	Fuel Burning Heat or Power Generators	EPA Approval 1/29/1979
		Current Technology Evaluation
2.21	Organic Liquid Storage and Transfer	EPA Approval 2/1/2006
		Recent EPA Approval
2.22	Gasoline Dispensing Facilities	EPA Approval 1/23/2003
		Recent EPA Approval
2.23	Fugitive Hydrocarbon Emissions	EPA Approval 11/26/1999
		Current Technology Evaluation
2.24	Solvent Cleaning Operations	EPA Approval 12/13/1994
	(Degreasing)	Current Technology Evaluation
2.25	Metal Parts and Products Coating	EPA Approval 2/12/1996
	Operations	Current Technology Evaluation
2.26	Motor Vehicle and Mobile Equipment	EPA Approval 4/30/1996
	Coating Operations	Current Technology Evaluation
2.27	Industrial, Institutional, and Commercial	EPA Approval 6/17/1997
	Boilers, Steam Generators, and Process Heaters	Current Technology Evaluation
2.28	Cutback and Emulsified Asphalts	EPA Approval 2/5/1996
		Current Technology Evaluation
2.29	Graphic Arts Printing Operations	EPA Approval 8/21/1998
		Current Technology Evaluation
2.30	Polyester Resin Operations	EPA Approval 7/21/1999
		Current Technology Evaluation
2.31	Surface Preparation and Cleanup	EPA Approval 4/2/1999
		Current Technology Evaluation
2.32	Stationary Internal Combustion Engines	EPA Approval 1/28/2002
		Recent EPA Approval
2.33	Adhesive Operations	EPA Approval 2/12/1996
		Current Technology Evaluation
2.34	Stationary Gas Turbines	EPA Approval 9/03/1998
		Current Technology Evaluation
2.35	Pharmaceutical Manufacturing	EPA Approval 2/24/1997
	Operations	Current Technology Evaluation
2.37	Natural Gas-Fired Residential water	EPA Approval 10/28/1999
	Heaters	Current Technology Evaluation

Table F - Major Sources Within District

Facility ID	Facility Name	Facility Description	CTG Source?	Rule Covering Primary Emissions
260	Leer West	Truck Cap and Tonneau Manufacturer	Yes	Rule 2.30
492	Fleetwood Homes of California	Housing Manufacturer	Yes	Rules 2.25 & 2.33
259	MM Yolo Power LLC	Electrical Power Production for Landfill Gas	Yes	Rule 2.32
46	Equilon Enterprises LLC	Petroleum Bulk Storage & Terminal Loading	Yes	Rule 2.21
44	BP West Coast Products, LLC	Petroleum Bulk Storage & Terminal Loading	Yes	Rule 2.21
209	Agrium U.S. Inc.	Distribution & Manufacturer of Nitrogen Fertilizer	Yes	No Rule
5498, 5010	California Medical Facility & California State Prison – Solano / Prison Authority	Psychiatric, Medical Care, Housing and Supervision for Level 3 Inmates, Correctional Detention Center for Male Inmates	Yes	Rules 2.27 & 2.32
25	University of California, Davis	School University	Yes	Rules 2.27 & 2.34
5139	Premier Industries, Inc	Processor of Expanding Polystyrene used for Building Industry Materials and Packaging	Yes	No Rule
257	Woodland Biomass Power Ltd.	Biomass Fired Boiler System Supplying a Turbine Generating Electrical Power	No	No Rule

Note: There are several sources that are not major sources, but that have a Title V permit. These sources are: Norcal Waste Systems, CalPeak Power, and the Yolo County Central Landfill.