VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT

2014 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT) STATE IMPLEMENTATION PLAN (SIP) REVISION

JUNE 10, 2014

BACKGROUND

The federal Clean Air Act Amendments (CAAA) of 1990 give the states primary responsibility for achieving the national ambient air quality standards (NAAQS). The NAAQS are set by the U.S. Environmental Protection Agency (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 State Implementation Plan (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 before they can be implemented by state and local governments. Once approved by the EPA, a SIP becomes a legally binding document under both state and federal law, and may be enforced by either government.

Since its formation in 1968, the Ventura County Air Pollution Control District has prepared numerous air quality planning documents to meet state and federal clean air mandates. The most important of these are the air quality management plans (AQMPs). These documents outline the District's long-range strategy for providing clean, healthful air to the citizens and businesses of Ventura County and, once approved by EPA, become components of the California SIP.

The AQMPs are not one-time documents, but periodically get updated and revised in accordance with changes in governing law and air pollution control science and technology. Moreover, each successive AQMP builds on its predecessor. The last major Ventura County AQMP was the 2007 AQMP. It was prepared to satisfy requirements of the CAAA for the 1997 federal 8-hour ozone standard.

Central to Ventura County's AQMPs are stationary source control measures. Stationary source control measures are techniques and equipment for reducing ozone precursor emissions, reactive organic compounds (ROC) and nitrogen oxides (NOx), from stationary sources in the county. Examples of stationary source control measures include gasoline station vapor recovery systems, landfill gas recovery systems, and catalytic emission control systems on engines and various other combustion devices.

Stationary source control measures provide the framework from which enforceable rules that reduce harmful air emissions and improve air quality are developed. The District's rules apply to many activities including open burning, incineration, gasoline storage, paint and solvent use, dry cleaning, screen printing, asphalt paving, chrome plating, fuel combustion, and landfills.

The CAAA require that states achieve the NAAQS by specified dates based on the severity of an area's air quality problem. Ventura County is currently designated a serious ozone nonattainment area for the 2008 federal 8-hour ozone standard. As a serious nonattainment area, Ventura County is required

by the CAAA to attain the federal 8-hour ozone standard by December 31, 2021.

Sections 182(b)(2) and 182(f) of the federal Clean Air Act (42 U.S.C. §7511a) require that ozone nonattainment areas implement reasonably available control technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) issued by EPA and for "major sources" of VOC and 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 of ozone precursor emissions are controlled to a "reasonable" extent, but not necessarily to the more stringent best available control technology (BACT) or "lowest achievable emission rate" (LAER) levels expected for new or modified major stationary sources. CTGs define RACT for existing sources of air pollution. Emission sources covered by CTGs are known as CTG sources.

DISTRICT'S RACT SIP EVALUATION

INTRODUCTION

According to the EPA's Proposed Rule to Implement the 2008 8-Hour Ozone NAAQS (78 FR 34178; June 6, 2013), areas classified as moderate nonattainment 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 ozone SIPs.

RACT SIPs must contain adopted RACT regulations, certifications where appropriate that existing provisions are RACT, and/or "negative declarations" that there are no sources in the nonattainment area covered by a specific CTG source category. States must provide notice and opportunity for public comment on their RACT submission even where the state determines to certify that the existing provisions remain RACT or where the state submits a negative declaration. States must also submit appropriate supporting information for their RACT demonstrations.

RACT demonstrations can be made with either a RACT determination or by certifications that previously required RACT controls represent RACT for the 8-hour ozone standard. A RACT determination includes a description of the RACT emission limit for the source category with technical and economic feasibility analysis and a commitment to adopt such an emission limit in an enforceable regulation by the regulatory deadline. If existing regulations that are already part of the SIP meet current RACT requirements, the agency may include certifications to that effect in their RACT SIP updates. Alternatively, air pollution control agencies in nonattainment areas may adopt negative declarations documenting that the area has no stationary sources subject to RACT requirements.

Areas should use current EPA guidance and any other information available in making RACT determinations. EPA has recognized that existing CTGs and ACTs for many source categories have not been updated in a number of years. However, in most cases, more recent technical information is available in other forms, such as EPA's RACT/BACT/LAER Clearinghouse; SIPs for other nonattainment areas, in particular those areas with higher classifications; the ''Menu of Control Measures'' for NOX and VOC; and emissions standards developed under CAA section 111(d) and new source review

(NSR)/prevention of significant deterioration (PSD) settlement agreements. As part of their RACT SIP submission, areas should provide adequate documentation that they have considered control technology that is economically and technologically feasible.

The analysis of economic and technological feasibility should be based on information that is current as of the time of development of the RACT SIP for the 2008 ozone NAAQS. In other words, it is not sufficient for areas to rely on previous RACT determinations without considering more recent information. Where public commenters submit specific information about controls that are alleged to be reasonably available in light of technological and economic feasibility, the area should consider such information in developing its RACT SIP. The EPA generally considers controls that have been achieved in practice by other existing sources in the same source category to be technologically and economically feasible.

EPA Headquarters released official guidance for preparing RACT SIPs on May 18, 2006. The guidance is in a question and answer format and is titled *Questions Related to RACT in 8-hour Ozone Implementation* (May 18, 2006). In addition, EPA Region 9 issued a basic framework for the RACT SIPs. That framework was contained in a letter (March 9, 2006) from EPA Region 9 to the California Air Resources Board (CARB) and is presented below:

- Describe efforts to identify all source categories within the District requiring RACT, including CTG sources (i.e., covered by an EPA Control Techniques Guideline document) and major non-CTG sources.

- Submit Negative Declarations where there are no facilities (major or minor) within the District subject to a CTG.

- 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 Techniques (ACT) guidance, Maximum Achievable Control Technology (MACT) standards, New Source Performance Standards (NSPS), California Suggested Control Measures (SCM) and RACT/Best Available Retrofit Control Technology (BARCT) determinations, regulations adopted in other Districts, and guidance and rules developed by other state and local agencies.

- Some Districts may use the California Air Pollution Control Officers Association (CAPCOA) September 2003 *Potential All Feasible Measures (AFM) Report* to help demonstrate RACT. If so, the RACT SIP should certify that local regulations are equivalent to AFM, justify the assumption that the AFM fulfilled RACT in 2003, and include some sort of certification or demonstration that no additional controls have become more reasonably available since then.

DETERMINATION OF RACT

CTG Sources

The EPA has issued CTGs defining RACT for existing facilities that emit air pollutants. A list of CTGs and ACT documents are posted at http://www.epa.gov/glo/SIPToolkit/ctgs.html.

District staff reviewed the list and, for those source categories with a CTG, compared the sources covered by the CTG to each District rule.

Table B-1 presents the source categories, reference documents, applicable District rules, and the date the rules were adopted and most recently revised.

Table B-2 presents CTG source categories without sources subject to the CTGs in the District. In most such cases, there are no applicable District rules because there are no sources in the county. This was determined through the District's permit system, emissions inventory systems, and knowledgeable staff of the District's permit and enforcement divisions. In some cases, District rules applicable to the CTG source category were written for sources that no longer exist in the district or cover sources with emissions below the applicability threshold of the CTG.

There is one source category listed in Table B-2 that is a special case: Agricultural Pesticides. Ventura County has a substantial agricultural industry and agricultural pesticide use is a substantial source of ROCs in the county. However, agricultural pesticide use is not defined as a stationary source. Moreover, agricultural pesticide usage is regulated by the State of California and therefore is not under the District's jurisdiction.

Major Non-CTG Sources

Sources not subject to CTGs, but for which RACT may still be required, are referred to as non-CTG sources. For this evaluation, District staff examined non-CTG sources that have the potential to emit 50 tons or more per year of either NOx or VOC. Twenty-five tons per year is the District's current definition of "major source" in District Rule 26.1 (New Source Review). However, under EPA's 8-hour ozone regulations for serious ozone nonattainment areas, the District's major source threshold is 50 tons per year of either ROC or NOx for major stationary sources. There are fifteen sources in Ventura County with ROC and/or NOx emissions of 50 tons per year or more.

Table B-3 lists all of the 50 tons per year or greater "major source" ROC and NOx facilities in Ventura County. Table B-3 gives each facility's permit number and facility name. Table B-3 also presents each District rule evaluated for the RACT SIP that applies to each facility.

HOW DISTRICT RULES WERE DETERMINED TO MEET RACT REQUIREMENTS

District staff started its RACT SIP evaluation by reviewing all available CTGs and ACTs and comparing them to District rules and sources. For each source category, District staff identified applicable sources and District rules. This was accomplished through the District's permit and emissions inventory systems, and knowledgeable staff of the District's permit and enforcement divisions.

Following identification of District rules to be evaluated for the RACT SIP, District staff made determinations as to whether the rules meet RACT. The determinations were primarily based on comparing the rules with similar rules adopted by air districts with higher or "worse" ozone nonattainment classifications, pursuant to EPA's June 2013 Proposed Ozone Implementation Regulation and EPA Region 9's March 2006 framework for the RACT SIPs (both discussed above). District staff also considered the District's 2006 and 2009 RACT SIP evaluations.

Staff included cost effectiveness in the evaluations as well. The District's 2014 RACT

SIP evaluations are presented starting on page 21. The evaluations provide a determination whether each rule meets RACT as written or if updates are needed.

RACT SIP EVALUATION FINDINGS

Table B-4 presents all of the District rules evaluated for the 2014 RACT SIP. Given for each rule is the rule name, whether there is a corresponding CTG or ACT applicable to each rule, the original rule adoption date, and date of last rule revision.

All rules applicable to CTG source categories were determined to meet or exceed the CTG requirements during the 2006 and 2009 RACT SIP updates, so the rules were not compared to CTG requirements again.[1] However, since many CTGs have not been updated for many years, staff compared District rules to rules adopted by districts with higher or "worse" ozone nonattainment classifications.

Staff included cost effectiveness in the evaluations. In cases where rules in air districts with higher ozone nonattainment classifications contain stricter requirements than District rules for similar sources, staff evaluated the cost effectiveness of those rules for application as RACT in Ventura County. EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. Therefore, if the cost, in dollars per ton of pollutant removed, exceeded certain thresholds the control requirements were considered beyond RACT for Ventura County.

[1] Ventura County APCD's 2006 RACT SIP certified the District's rules met RACT and the 2009 RACT SIP Revision certified the District's rules met EPA's CTGs issued between 2006 and 2008 and re-certified that all major non-CTG sources of VOC or NOx were covered by RACT rules.

For NOx, staff used the inflation-adjusted cost threshold for NOx discussed by EPA in the Final Rule to implement the 8-hour Ozone National Ambient Air Quality Standard on page 71654 of the Federal Register Vol. 70, No. 228 published Tuesday, November 29, 2005. A range of $160–1,300 per ton of NOx removed was considered RACT in 1994. Adjusting for inflation, staff used a cost effectiveness threshold of $1,990 per ton of NOx removed for RACT determinations for the 2014 RACT SIP.

For VOC, staff considered the BACT cost effectiveness threshold of $9 per pound ($18,000 per ton) beyond RACT by definition. Therefore, any technology with costs greater than $18,000 per ton of VOC removed was considered not economically feasible as RACT. Since EPA has not provided guidance for VOC RACT cost-effectiveness, staff used $4,500 per ton of VOC controlled as a starting point to determine if a technology was economically feasible for application as RACT in Ventura County. This number was considered reasonable based on records of emission reduction credit trading in 2012 (the most recent data available).

RACT Findings - CTG Sources & Major Non - CTG Sources

Based on the foregoing, District staff finds that all District rules that apply to ozone precursor emissions fulfill RACT requirements for the 8-hour ozone NAAQS. At a minimum, the rules meet RACT or, more commonly, significantly exceed RACT. Moreover, District staff finds that all CTG sources and major non-CTG sources under its jurisdiction are controlled to RACT or better standards. It should be noted that historically, the District has been very progressive and has consistently adopted rules that are much stricter than RACT. Therefore, even rules that have not been revised for a

decade or more are often still effective as RACT or beyond.

RACT Findings – Negative Declarations

For any CTG/ACT source category where the District has no sources to which the CTG/ACT applies, the District must submit a finding to that effect called a Negative Declaration. The District has reviewed its permit and emissions inventory systems and consulted with knowledgeable District staff to determine if sources exist within the District for each CTG source category. For each CTG/ACT source category listed in Table B-2, the District has determined one or more of the following situations exist:

- There are no sources or emitting facilities within the District for the specified CTG/ACT source category.
- There are no sources or emitting facilities within the District with emissions exceeding the specific applicability threshold for the CTG/ACT source category (i.e. major sources or sources above the threshold specified in CTG/ACT document), before consideration of controls.
- All sources within the District for the CTG/ACT source category were constructed with BACT so they are by definition subject to controls beyond RACT and the CTG/ACT does not apply.

This constitutes the District's Negative Declarations for the 2014 RACT SIP. If sources in any of the CTG/ACT categories locate within the District in the future, they will be subject to the District's New Source Review requirements, which are more stringent than RACT.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The 2014 RACT SIP Revision is an evaluation of current District air pollution rules and will neither result in new or revised District rules or regulations nor any physical change in the environment. Therefore, adoption of the proposed 2014 RACT SIP Revision is not a "Project" as defined in Section 15378(a) of the CEQA Guidelines and therefore is not subject to CEQA review pursuant to CEQA Guidelines Section 15060(c)(3).

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
Coatings and Solvents					
Aerospace Manufacturing and Rework Operations & Coating Operations	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 1997/12), See also Aerospace MACT (59 FR-29216 6/06/94, 1994/06)	Applies to aerospace coatings and cleaning solvents used at aerospace manufacturing and rework operations including contractors and subcontractors.	Rule 74.13 - Aerospace Assembly and Component Manufacturing Operations	4/15/1986	9/11/2012
		Supersedes the applicable parts of the Miscellaneous Metal Part and Products CTG. Does not apply to manufacturing or rework operations involving space vehicles; rework operations performed on antique aerospace vehicles or components; or research and development, quality control, laboratory testing, and electronic parts and assemblies (except for cleaning and coating of completed assemblies).	Rule 74.12 - Surface Coating of Metal Parts and Products	11/19/1985	4/8/2008
Automobile Refinishing	Reduction of Volatile Organic Compound Emissions from Automobile Body Refinishing (EPA-453/R-94-031, 1994/04)	Applies to automobile refinishing operations.	Rule 74.18 – Motor Vehicle and Mobile Equipment Coating Operations	1/28/1992	11/11/2008
	Automobile Refinishing (EPA-450/3-88-009, 1988/10)	Applies to automobile refinishing operations.	Rule 74.18 – Motor Vehicle and Mobile Equipment Coating Operations	1/28/1992	11/11/2008
Paper and Fabric, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 1977/05)	For fabric and paper coating, applies to all coatings put on paper, fabric, or plastic film, and includes decorative coatings on metal foil such as gift wrap and packaging.	Rule 74.3 - Paper, Fabric and Film Coating Operations	5/29/1979	12/10/1991
Graphic Arts	ACT - Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography (EPA-450/2-78-033, 1978/12)	Applies to graphic arts operations that use the flexographic and rotogravure printing processes as applied to both publication and packaging printing.	Rule 74.19 - Graphic Arts	8/11/1992	6/14/2011
	Offset Lithography Printing (EPA-453/R-94-054, 1994/06)	Applies to graphic arts operations that use the offset lithographic printing process.	Rule 74.19 - Graphic Arts	8/11/1992	6/14/2011
	Offset Lithographic Printing and Letterpress Printing (EPA-453/R-06-002, 2006/09)	Applies to graphic arts operations that use the offset lithographic printing or letterpress printing process.	Rule 74.19 - Graphic Arts	8/11/1992	6/14/2011

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules (cont'd)

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
		For fabric coating, applies to all types of coatings applied to fabric and any decorative or protective topcoat applied over vinyl coated fabric or vinyl sheets. Does not apply to the application of vinyl plastisol to the fabric.	Rule 74.3 - Paper, Fabric and Film Coating Operations	5/29/1979	12/10/1991
		For paper coatings, applies to all coatings put on paper, pressure sensitive tapes regardless of substrate (e.g. paper fabric or plastic film), and related web coating processes on plastic film such as typewriter ribbons, photographic film, or magnetic tape. Also includes decorative coatings on metal foil such as gift wrap and packaging.	Rule 74.3 - Paper, Fabric and Film Coating Operations	5/29/1979	12/10/1991
Metal Furniture, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture (EPA-450/2-77-032, 1977/12)	Applies to surface coating of metal furniture by metal furniture manufacturers.	Rule 74.12 - Surface Coating of Metal Parts and Products	11/19/1985	4/8/2008
	Metal Furniture Coatings (EPA 453/R-07-005, 2007/09)	Applies to metal surface coating units at facilities where the total actual VOC emissions from all metal furniture coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	Rule 74.12 - Surface Coating of Metal Parts and Products		
Metal Parts and Products, Surface Coating of Miscellaneous	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015, 1978/06)	Applies to industries that are not covered by specific CTG documents (Specific CTGs have been published for can, coil, automobile and light duty truck, metal furniture, magnet wire, and large appliances.)	Rule 74.12 - Surface Coating of Metal Parts and Products	11/19/1985	4/8/2008
	Miscellaneous Metal and Plastic Parts Coatings (EPA 453/R-08-003, 2008/09)	Applies to industries that are not covered by specific CTG documents where the total actual VOC emissions from all metal and/or plastic parts coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	Rule 74.12 - Surface Coating of Metal Parts and Products	11/19/1985	4/8/2008
Shipbuilding	Shipbuilding and Ship Repair Operations (Surface Coating) (61 FR 44050 8/27/96, 1996/08)	Applies to coatings and solvents used for building or maintaining metal marine or fresh-water metal hulled vessels used for military or commercial operations, including self-propelled vessels and those towed by other craft (barges). This definition includes, but is not limited to, all military vessels, commercial cargo and passenger (cruise) ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges.	Rule 74.24 - Marine Coating Operations	3/8/1994	9/11/2012

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules (cont'd)

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
			Rule 74.24.1 – Pleasure Craft Coating and Commercial Boatyard Operations	11/10/1998	1/8/2002
	Surface Coating Operations at Shipbuilding and Ship Repair Facilities (EPA-453/R-94-032, 1994/04)	Applies to any marine or fresh-water metal hulled vessel used for military or commercial operations, including self-propelled vessels and those towed by other craft. This definition includes, but is not limited to, all military vessels, commercial cargo and passenger ships, ferries, barges, tankers, container ships, patrol and pilot boats, and dredges. Pleasure craft, such as recreational boats and yachts, are not included.	Rule 74.24 - Marine Coating Operations	3/8/1994	9/11/2012
			Rule 74.24.1 – Pleasure Craft Coating and Commercial Boatyard Operations	11/10/1998	1/8/2002
Solvent Metal Cleaning	Control of Volatile Organic Emissions from Solvent Metal Cleaning (EPA-450/2-77-022, 1977/11)	Applies to cold cleaners, open top vapor degreasers, and conveyorized degreasers which use volatile solvents to clean metal parts.	Rule 74.6 - Surface Cleaning and Degreasing	5/29/1979	11/11/2003 - effective 7/1/2004
	ACT - Halogenated Solvent Cleaners (EPA-450/3-89-030, 1989/08)	Applies to cleaning machines that use halogenated solvents.	Rule 74.6.1 - Batch Loaded Vapor Degreasers	5/29/1979	11/11/2003 - effective 7/1/2004
	ACT - Industrial Cleaning Solvents, ACT: (EPA-453/R-94-015, 1994/02), CTG: (EPA-453/R-06-001, 2006/09)	Applies to industrial cleaning with organic solvents.	Rule 74.6 - Surface Cleaning and Degreasing	5/29/1979	11/11/2003 - effective 7/1/2004
			Rule 74.6.1 - Batch Loaded Vapor Degreasers	5/29/1979	11/11/2003 - effective 7/1/2004
Traffic Markings	Reduction of VOC Emissions from the Application of Traffic Markings (EPA-450/3-88-007, 1988/08)	Applies to application of highway traffic markings.	74.2 – Architectural Coatings	6/19/1979	11/12/2010
Wood Furniture Manufacturing	Control of VOC Emissions from Wood Furniture Manufacturing Operations (EPA-453/R-96-007, 1996/04)	Applies to any facility that finishes wood furniture, or performs cleaning or wash-off associated with wood furniture finishing operations.	Rule 74.30 - Wood Products Coatings	5/17/1994	6/27/2006
Petroleum					
Bulk Gasoline Plants	Control of Volatile Organic Emissions from Bulk Gasoline Plants (EPA-450/2-77-035, 1977/12)	Applies to bulk plants with daily throughputs of 76,000 liters (20,077 gal.) gasoline or less.	Rule 70 - Storage and Transfer of Gasoline	6/25/1974	3/10/2009 effective 4/1/2009

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules (cont'd)

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
External Floating Roof Tanks, Petroleum Liquid Storage in	Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks (EPA-450/2-78-047, 1978/12)	Applies to external floating roof tanks larger than 150,000 liters (~40,000 gal. or 950 bbls.) storing petroleum liquids.	Rule 71.2 - Storage of Reactive Organic Compound Liquids	6/20/1978	9/26/1989
	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA 453/R-94-001, 1994/01)		Rule 74.26 - Crude Oil Storage Tank Degassing Operations	11/8/1994	N/A
Fixed Roof Tanks, Storage of Petroleum Liquids in	ACT - Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks (EPA-450/2-77-036, 1977/12)	Applies to storage vessels with capacities greater than 150,000 liters containing petroleum liquids with a true vapor pressure greater than 10.5 KPa. Exempts fixed roof tanks with capacities less than 1,600,000 liters used to store produced crude or condensate prior to lease custody transfer.	Rule 71.2 - Storage of Reactive Organic Compound Liquids	6/20/1978	9/26/1989
	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA-453/R-94-001, 1994/01)	Applies to storage tanks in all industries, but primarily in the petroleum refineries, pipelines, chemical plants, liquid terminals.	Rule 71.2 - Storage of Reactive Organic Compound Liquids	6/20/1978	9/26/1989
			Rule 74.26 - Crude Oil Storage Tank Degassing Operations	11/8/1994	N/A
Natural Gas/Gasoline Processing Plants, Equipment Leaks from	Control of VOC Equipment Leaks from Natural Gas/Gasoline Processing Plants (EPA-450/3-83-007, 1983/12)	Applies to facilities engaged in the separation of natural gas liquids from field gas and/or fraction of the liquids into natural gas products, such as ethane, propane, butane and natural gasoline. It is not applicable to compressor stations, dehydration units, sweetening units, field treatment, underground storage facilities, liquefied natural gas units and field gas gathering systems unless they are located at a gas plant.	Rule 74.10 - Components at Crude Oil and Natural Gas Production and Processing Facilities	9/29/1981	3/10/1998
Gasoline Dispensing Stage II Vapor Recovery	Stage II Gasoline Dispensing Facilities (EPA-450/3-91-022a, 1991/12) †	Applies to gasoline dispensing into motor vehicles at gasoline dispensing facilities.	Rule 70 - Storage and Transfer of Gasoline	6/25/1974	3/10/2009 effective 4/1/2009
Gasoline Service Stations	Design Criteria for Stage I Vapor Control Systems - Gasoline Service Stations (EPA-450/R-75-102, 1975/11)	Applies to filling of gasoline storage tanks from gasoline tanker trucks.	Rule 70 - Storage and Transfer of Gasoline	6/25/1974	3/10/2009 effective 4/1/2009
Organic Liquid Storage	Volatile Organic Liquid Storage in Floating and Fixed Roof Tanks (EPA/453 R-94-001, 1994/01)	Applies to storage tanks in all industries, but primarily in petroleum refineries, pipelines, chemical plants, liquid terminals	Rule 71.2 - Storage of Reactive Organic Compound Liquids	6/20/1978	9/26/1989

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules (cont'd)

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
Petroleum Refinery Equipment, Leaks from	Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 1978/06)	Applies to leaks from equipment such as pumps, compressors, flanges, valves, and pressure relief devices.	Rule 74.7 - Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries and Chemical Plants	5/29/1979	10/10/1995
Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds (EPA-450/2-77-025, 1977/10)	Applies to non-condensables from vacuum producing systems, wastewater separators, and all pressurized process units.	Rule 74.8 - Refinery Vacuum Producing Systems, Wastewater Separators and Process Turnarounds	6/19/1979	7/5/1983
			Rule 74.7 - Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries and Chemical Plants	5/29/1979	10/10/1995
Synthetic Organic Chemical and Polymer Manufacturing Equipment, Equipment Leaks from	Control of VOC Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 1984/03)	Applies to leaks of process fluids (gaseous or liquid) from plant equipment such as pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, and cooling towers.	Rule 74.7 – Fugitive Emissions of Reactive Organic Compounds at Petroleum Refineries and Chemical Plants	5/29/1979	10/10/1995
Tank Trucks, Gasoline Loading Terminals	Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals (EPA-450/2-77-026, 1977/10)	Applies to tank truck terminals with daily throughputs greater than 76,000 liters (20,077 gal.).	Rule 70 - Storage and Transfer of Gasoline	6/25/1974	3/10/2009 effective 4/1/2009
Tank Trucks, Gasoline, and Vapor Collection Systems	Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems (EPA-450/2-78-051, 1978/12)	Applies to gasoline tank trucks that are equipped with vapor collection systems and the vapor collection systems at bulk terminals, bulk plants and service stations.	Rule 70 - Storage and Transfer of Gasoline	6/25/1974	3/10/2009 effective 4/1/2009
Stationary Source NOx					
Electric Utility Boilers	NOx Emissions from Utility Boilers (EPA-453/R-94-023, 1994/03)	Applies to electric utility boilers.	Rule 59 - Electrical Power Generating Equipment - Oxides of Nitrogen Oxide	10/6/1969	7/15/1997

Table B-1, Source Categories, CTG/ACT List, and Applicable District Rules (cont'd)

Source Category	Reference Document *	Applicability	VCAPCD Rule	Date Adopted	Date Last Revised
Industrial Commercial Boilers	ACT – NOx Emissions from Industrial Commercial & Institutional Boilers (EPA-453/R-94-022, 1994/03)	Applies to boilers used in industrial facilities.	Rule 74.15 - Boilers, Steam Generators and Process Heaters	3/28/1989	11/8/1994
			Rule 74.15.1 - Boilers, Steam Generators, and Process Heaters	5/11/1993	9/11/2012
Process Heaters	ACT – NOx Emissions from Process Heaters (EPA-453/R-93-034, revised 1993/09)	Applies to direct-fired heaters used primarily in the petroleum industry.	Rule 74.15 - Boilers, Steam Generators and Process Heaters	3/28/1989	11/8/1994
			Rule 74.15.1 - Boilers, Steam Generators, and Process Heaters	5/11/1993	9/11/2012
Stationary Gas Turbines	ACT - NOx Emissions from Stationary Combustion Turbines (EPA-453/R-93-007, 1993/01)	Applies to stationary gas turbines used in various applications and operations.	Rule 74.23 - Stationary Gas Turbines	3/14/1995	1/8/2002
Stationary Reciprocating Internal Combustion (IC) Engines	ACT - NOx Emissions from Stationary IC Engines (EPA-453/R-93-032, 1993/07, updated September 2000)	Applies to stationary reciprocating internal combustion engines.	Rule 74.9 - Stationary Internal Combustion Engines	7/21/1981	11/8/2005
Other					
Cutback Asphalt	Control of VOC from Use of Cutback Asphalt (EPA-450/2-77-037, 1977/12)	Applies to use of cutback asphalt used for roadway paving.	Rule 74.4 - Cutback Asphalt	6/19/1979	7/5/1983
Ethylene Oxide - Sterilization and Aeration	ACT - Ethylene Oxide Sterilization/Fumigation Operations (EPA-450/3-89-007, 1989/03)	Applies to ethylene oxide used as a sterilant/fumigant in production of medical equipment supplies, in miscellaneous sterilization and fumigation operations, and at hospitals.	Rule 62.6 - Ethylene Oxide - Sterilization and Aeration	7/16/1991	N/A
Industrial Adhesives	Control Techniques Guidelines for Miscellaneous Industrial Adhesives (EPA-453/R-08-005)	Applies to each miscellaneous industrial adhesive application process at facilities where the total actual VOC emissions from all industrial adhesive operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	Rule 74.20 – Adhesives and Sealants	6/8/1993	9/11/2012
Large Petroleum Dry Cleaners	Control of VOC Emissions from Large Petroleum Dry Cleaners, (EPA-450/3-82-009, 1982/09)	Applies to petroleum solvent dry cleaning facilities that consume 123,000 liters or more of petroleum solvent per year.	Rule 74.5.1 - Petroleum Solvent Dry Cleaning	12/4/1990	N/A

* EPA reference document numbers correspond to EPA Report column in table of Control Measures Guidance Documents found at http://www.epa.gov/glo/SIPToolkit/ctg_act/, accessed March 13, 2014

† Report not listed on web page cited above. Report number taken from actual reference document title page. Document obtained March 13, 2014 at http://www.epa.gov/airquality/ozonepollution/SIPToolkit/ctg_act/199111_voc_epa450_3-91-022a_stage2_gasoline_dispensing%28v1%29.pdf

Table B-2, CTG/ACT Source Categories for Which There Are No Subject District Sources

Source Category	Reference Document *	Applicability	Ventura County Sources?	RACT Analysis
Coatings and Solvents				
Aerospace Manufacturing and Rework Operations & Coating Operations	Control of VOC Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations (EPA-453/R-97-004, 1997/12), See also Aerospace MACT (59 FR-29216 6/06/94, 1994/06)	Applies to aerospace coatings and cleaning solvents use at aerospace manufacturing and rework operations that have the potential to emit greater than or equal to 25 tons per year of VOCs including contractors and subcontractors.	Yes	No sources with emissions greater than the CTG applicability threshold of 25 tons ROC per year.
Automobile and Light-duty Trucks, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources - Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks (EPA-450/2-77-008, 1977/5), Control Techniques Guidelines for Automobile and Light-Duty Truck Assembly Coatings (EPA 453/R-08-006, 2008/09)	For automobile & light truck coating, applies to all objects surface coated in automotive and light duty truck assembly plants. Does not apply to customizers, body shops or other repainters.	No	N/A**
Auto, Transport, Business Machine Plastic Coatings	ACT – Surface Coating of Automotive/Transportation and Business Machine Plastic Parts, (EPA-453/R-94-017, 1994/02)	Applies to surface coating of plastics used in motor vehicles and business machines.	No	N/A
Cans and Coils, Surface Coating of	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, 1978/06)	For cans, applies to sheet basecoat and over varnish, two-piece can exterior basecoat and over varnish, two and three-piece can interior body spray, two-piece can exterior end spray or roll coat, three piece can side seam spray, and end sealing compound.	No	N/A
		For coil coating, applies to prime and topcoat or single coat operation.	No	N/A
Flat Wood Paneling, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface Coating of Flat Wood Paneling (EPA-450/2-78-032, 1978/06), Control Techniques Guidelines for Flat Wood Paneling Coatings (EPA-453/R-06-004, 2006/09)	Applies to interior paneling made of wood products.	No	N/A
Flexible Packaging Printing	Control Techniques Guidelines for Flexible Packaging Printing (EPA-453/R-06-003, 2006/09)	Applies to flexible packaging printing operations that emit at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A
Ink and Paint Manufacturing	Control of VOC from Ink and Paint Manufacturing (EPA-450/3-92-013, 1992/04) †	Applies to products of the paint manufacturing industry, including architectural coatings, product coating for original equipment manufacturers, and special-purpose coatings. Also applies to ink manufacturing, including letterpress inks, lithographic and offset inks, gravure inks, and flexographic inks.	Yes	No major sources; Sources controlled with BACT.

Table B-2, CTG/ACT Source Categories for Which There Are No Subject District Sources (cont'd)

Source Category	Reference Document	Applicability	Ventura County Sources?	RACT Analysis
Large Appliances, Surface Coating of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances (EPA-450/2-77-034, 1977/12), Control Techniques Guidelines for Large Appliance Coatings (EPA 453/R-07-004, 2007/09)	Applies to the coating of large appliances, such as doors, cases, lids, panels and interior support parts of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, and similar products.	No	N/A
Magnet Wire, Surface Coating for Insulation of	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire (EPA-450/2-77-033, 1977/12)	Applies to wire coating curing ovens.	No	N/A
Metal Furniture Coatings	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture (EPA-450/2-77-032, 1977/12)	Applies to surface coating of metal furniture by metal furniture manufacturers.	No	N/A
	Control Techniques Guidelines for Metal Furniture Coatings (EPA 453/R-07-005, 2007/09)	Applies to metal surface coating units at facilities where the total actual VOC emissions from all metal furniture coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A
Paper, Film and Foil Coatings	Control Techniques Guidelines for Paper, Film and Foil Coatings (EPA 453/R-07-003, 2007/09)	Applies to facilities where the total actual VOC emissions from all paper, film and foil coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A
Petroleum				
Petroleum Refineries	Control Techniques for VOC Emissions from Stationary Sources (EPA-453/R-92-018, 1992/12)	Applies to petroleum refineries.	No	N/A
	Control of Refinery Vacuum Producing Systems, Wastewater Separators and Process Unit Turnarounds (EPA 450/2-77-025, 1977/10)	Applies to metal surface coating units at facilities where the total actual VOC emissions from all metal furniture coating operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A
	Control of VOC Leaks from Petroleum Refinery Equipment (EPA-450/2-78-036, 1978/06)	Applies to leaks equipment such as pumps, compressors, flanges, valves, and pressure relief devices.	No	N/A
Stationary Source NOx				
Cement Manufacturing	NOx Emissions from Cement Manufacturing (EPA-453/R-94-004, 1994/03, and update EPA-457/R-00-002, 2000/09)	Applies to the kilns used in cement manufacturing.	No	N/A
Glass Manufacturing	NOx Emissions from Glass Manufacturing (EPA-453/R-94-037, 1994/06)	Applies to glass manufacturing.	No	N/A
Iron and Steel	NOx Emissions from Iron and Steel (EPA-453/R-94-065, 1994/9)	Applies to iron and steel manufacturing.	No	N/A

Table B-2, CTG/ACT Source Categories for Which There Are No Subject District Sources (cont'd)

Source Category	Reference Document	Applicability	Ventura County Sources?	RACT Analysis
Nitric and Adipic Acid Manufacturing Plants	NOx Emissions from Nitric and Adipic Acid Manufacturing Plants (EPA-453/3-91-026, 1991/12)	Applies to nitric and adipic acid manufacturing operations.	No	N/A
Other				
Agricultural Pesticides	Control of VOC from the Application of Agricultural Pesticides (EPA-453/R-92-011, 1993/3)	Applies to pesticides used for agricultural purposes.	Yes	Regulated by the State of California Department of Pesticide Regulation
Batch Processes	Control of VOC Emissions from Batch Processes (EPA-453/R-93-020, 1994/2, a.k.a. EPA-453/R-93-017)	Applies to plastic materials and resins, pharmaceuticals, gum and wood chemicals, cyclic crudes and intermediates, industrial organic chemicals, and agricultural chemicals.	Yes	No major sources; Sources controlled with BACT.
Commercial Bakeries	Bakery Ovens (EPA-453/R-92-017, 1992/12)	Applies to commercial bakery operations.	Yes	No major sources; Sources controlled with BACT.
Ethylene Oxide - Sterilization and Aeration	Ethylene Oxide Sterilization (EPA-450/3-89-007, 1989/03)	Applies to ethylene oxide used as a sterilant/fumigant in production of medical equipment supplies, in miscellaneous sterilization and fumigation operations, and at hospitals.	Yes	No major sources.
Fiberglass Boat Manufacturing	Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials (EPA 453/R-08-004, 2008/09)	Applies to facilities that manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks, where the total actual VOC emissions from all fiberglass boat manufacturing operations, including cleaning activities, covered by the CTG are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	No	N/A
Industrial Adhesives	Control Techniques Guidelines for Miscellaneous Industrial Adhesives (EPA-453/R-08-005, 2008/09)	Applies to each miscellaneous industrial adhesive application process at facilities where the total actual VOC emissions from all industrial adhesive operations, including cleaning activities, are at least 6.8 kg/day (15 lb/day) of VOC before consideration of controls.	Yes	No sources with emissions greater than the CTG applicability threshold of 15 lb/day of VOC.
Industrial Wastewater	Industrial Wastewater CTG (Draft) EPA-453/D-93-056, 1992/9); ACT (1994/4)	Applies to emissions from the collection and treatment of industrial wastewater from: the organic chemicals, plastics, and synthetic fibers industry; the pesticides manufacturing industry; the pharmaceuticals manufacturing industry; and the hazardous waste treatment, storage, and disposal facilities industry.	No	N/A
Leather Tanning and Finishing Operations	Leather Tanning and Finishing Operations (EPA-453/R-93-025) ‡	Applies to leather finishing operations.	No	N/A
Organic Waste	ACT - Organic Waste Process Vents (EPA-450/3-91-007, 1990/12)	Applies to process vents including those on waste management units at TSDF treating wastes with total organics concentration of less than 10 ppmw and those on treatment units that are part of a waste management system exempt from RCRA permitting.	No	N/A
Pharmaceutical Products	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products (EPA-450/2-78-029, 1978/12)	Applies to facilities and operations that synthesize pharmaceutical products.	No	N/A

Table B-2, CTG/ACT Source Categories for Which There Are No Subject District Sources (cont'd)

Source Category	Reference Document	Applicability	Ventura County Sources?	RACT Analysis
Plywood Veneer Dryers	Control Techniques for Organic Emissions from Plywood Veneer Dryers (EPA-450/3-83-012, 1983/05)	Applies to softwood plywood manufacturing operations.	No	N/A
Pneumatic Rubber Tires, Manufacture of	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires (EPA-450/2-78-030, 1978/12)	Applies to manufacturing processes; undertread cementing, tread-end cementing, bead dipping, and green tire spraying.	No	N/A
Polyester Resin	Control of VOC Emissions from Manufacture of High - Density Polyethylene, Polypropylene, and Polystyrene Resins (EPA-450/3-83-008, 1983/11)	Applies to the manufacturing of high-density polyethylene, polypropylene, and polystyrene.	No	N/A
	Control of VOC Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (EPA-450/3-83-006, 1984/03	Applies to emissions from equipment used in synthetic organic chemical polymers and resins.	No	N/A
	Control of VOC Emissions from Polystyrene Foam Manufacturing (EPA-450/3-90-020, 1990/09)	Applies to polystyrene foam manufacturing	Yes	No major sources; Sources controlled with BACT.
Synthetic Organic Chemical Manufacturing	Control of VOC Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry (EPA-450/3-84-015, 1984/12)	Applies to air oxidation processes used in the synthetic organic chemical manufacturing industry.	No	N/A
	SOCMI Distillation and Reactor Processes (EPA-450/4-91-031, 1983/08)	Applies to reactor processes that chemically change feed stocks into products or intermediate chemicals and distillation processes used to separate chemicals in the synthetic organic chemical manufacturing industry.	No	N/A
Petroleum Solvent Dry Cleaners	Control of VOC Emissions from Large Petroleum Dry Cleaners (EPA-450/3-82-009, 1982/09)	Applies to petroleum solvent dry cleaning facilities that consume 123,000 liters or more of petroleum solvent per year.	No	N/A

* Report Numbers correspond to EPA Report column in table of Control Measures Guidance Documents found at http://www.epa.gov/glo/SIPToolkit/ctg_act/; accessed March 13, 2014.

** Not applicable

† Report not listed on web page cited above. Report number taken from actual reference document title page. Document obtained March 26, 2014 at http://www.epa.gov/ttncatc1/dir1/ink_paint.pdf.

‡ Report not listed on web page cited above. Report number taken from actual reference document title page. Document obtained March 26, 2014 at http://nepis.epa.gov/Exe/ZyNET.exe/2000HJFP.TXT?ZyActionD=ZyDocument&Client=EPA&Index=1991+Thru+1994&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A\zyfiles\Index%20Data\91thru94\Txt\00000014\2000HJFP.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h|-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p|f&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

Table B-3, Major Sources in Ventura County

APCD Permit No.	Facility Name	Rules Evaluated that Apply to Ventura County Major Source Facilities											
		59	70	71.1	71.3	71.4	71.5	74.2	74.4	74.6	74.9	74.10	74.11
00004	Vintage Production California LLC	·	·	✓	✓	✓	✓	✓	·	✓	✓	✓	·
00008	Vintage Production California LLC	·	·	✓	✓	✓	✓	✓	✓	✓	·	✓	·
00012	Tenby Production Facility	·	·	✓	✓	✓	·	✓	✓	✓	✓	✓	✓
00013	Mandalay Generating Station	✓	✓	·	·	·	·	✓	·	✓	✓	·	·
00015	Procter & Gamble Paper Products	·	·	·	·	·	·	✓	·	✓	✓	·	·
00036	Trinity ESC - Frazier Park	·	·	·	·	·	·	✓	·	✓	·	·	·
00041	Aera Energy, LLC	·	·	✓	✓	✓	✓	✓	✓	✓	✓	✓	·
00053	Vintage Production California LLC	·	·	✓	✓	✓	✓	·	·	✓	·	·	·
00061	Southern California Gas Company	·	·	·	·	·	·	✓	·	✓	✓	·	·
00065	Ormond Beach Gen. Station	✓	✓	·	·	·	·	✓	·	✓	✓	·	·
00157	New-Indy Oxnard, LLC	·	·	·	·	·	·	✓	·	✓	·	·	·
00990	Seneca Resources Corporation	·	·	✓	✓	✓	✓	·	·	✓	✓	✓	·
01207	Naval Base Ventura County	·	✓	·	·	·	·	✓	✓	✓	✓	·	·
01492	Platform Gilda	·	·	✓	·	✓	·	✓	·	✓	✓	✓	·
01494	Platform Gail	·	·	✓	·	✓	✓	·	·	✓	✓	✓	·

Table B-3, Major Sources in Ventura County (cont'd)

APCD Permit No.	Facility Name	Rules Evaluated that Apply to Ventura County Major Source Facilities											
		74.11.1	74.13	74.15	74.15.1	74.16	74.19	74.22	74.23	74.26	74.27	74.28	74.29
00004	Vintage Production California LLC	✓	·	·	✓	✓	·	✓	·	✓	·	·	·
00008	Vintage Production LLC	✓	·	·	·	✓	·	✓	✓	✓	·	·	✓
00012	Tenby Production Facility.	·	·	✓	✓	✓	·	✓	·	✓	·	·	✓
00013	Mandalay Generating Station	✓	·	·	·	·	·	✓	✓	·	·	·	✓
00015	Procter & Gamble Paper Products	✓	·	✓	·	·	✓	✓	✓	·	·	✓	·
00036	Trinity ESC - Frazier Park	✓	·	·	·	·	·	✓	·	·	·	·	✓
00041	Aera Energy, LLC	✓	·	✓	·	✓	·	✓	·	✓	·	✓	✓
00053	Vintage Production California LLC	·	·	✓	✓	✓	·	·	·	·	·	·	·
00061	Southern California Gas Co.	✓	·	·	·	·	·	✓	·	·	✓	·	✓
00065	Ormond Beach Generating Station	✓	·	·	·	·	·	✓	·	·	·	·	✓
00157	New-Indy Oxnard, LLC	✓	·	✓	·	·	·	·	✓	·	·	·	·
00990	Seneca Resources Corporation	·	·	✓	·	·	·	·	·	·	·	·	·
01207	Naval Base Ventura County	✓	·	·	·	·	·	·	·	·	✓	✓	✓
01492	Platform Gilda	✓	·	·	✓	✓	·	✓	·	·	·	·	·
01494	Platform Gail	·	·	·	·	✓	·	✓	✓	·	·	·	·

Table B-4, District Rules Evaluated for 2014 RACT SIP

VCAPCD Rule	Rule Name	CTG/ACT?	Date First Adopted	Date Last Revised	EPA Approval*
59	Electrical Power Generating Equipment Oxides of Nitrogen Emissions	Yes	10/6/1969	7/15/1997	7/20/1999
62.6	Ethylene Oxide - Sterilization and Aeration	Yes	7/16/91	N/A	8/4/1994
63	Separation and Combustion of Emissions	No	5/3/1972	11/21/1978	5/23/1979
69	Asphalt Air Blowing	No	5/23/1972	7/5/1983	4/17/1987
70	Storage and Transfer of Gasoline	Yes	6/25/1974	3/10/2009	1/31/2011
71.1	Crude Oil Production and Separation	No	6/20/1978	6/16/1992	8/4/1994
71.2	Storage of Reactive Organic Compound Liquids	Yes	6/20/1978	9/26/1989	12/5/1993
71.3	Transfer of Organic Reactive Compound Liquids	Yes	6/20/1978	6/16/1992	9/7/1995
71.4	Petroleum Sumps, Pits, Ponds, and Well Cellars	No	10/4/1988	6/8/1993	8/4/1994
71.5	Glycol Dehydrators	No	12/13/1994	N/A	2/29/1996
74.2	Architectural Coatings	No	6/19/1979	1/12/2010	7/6/2011
74.3	Paper, Fabric and Film Coating Operations	Yes	5/29/1979	12/10/1991	9/7/1995
74.4	Cutback Asphalt	Yes	6/19/1979	7/5/1983	4/17/1987
74.5.1	Petroleum Solvent Dry Cleaning	Yes	12/4/1990	N/A	3/24/1992
74.6	Surface Cleaning and Degreasing	Yes	5/29/1979	11/11/2003	10/25/2005
74.6.1	Batch Loaded Vapor Degreasers	Yes	5/29/1979	11/11/2003	10/25/2005
74.7	Fugitive Emissions of ROC at Petroleum Refineries and Chemical Plants (VOC)	Yes	5/29/1979	10/10/1995	7/25/1996
74.8	Refinery Vacuum Producing Systems, Wastewater Separators, and Process Turnarounds	Yes	6/19/1979	7/5/1983	4/17/1987
74.9	Stationary Internal Combustion Engines	Yes	7/21/1981	11/8/2005	7/30/2008
74.10	Components at Crude Oil and Natural Gas Producing and Processing Facilities	Yes	9/29/1981	3/10/1998	8/19/1999
74.11	Natural Gas-Fired Residential Water Heaters	No	4/9/1985	5/11/2010	Submitted to EPA †
74.11.1	Large Water Heaters and Small Boilers	Yes	9/14/1999	9/11/2012	Submitted to EPA †
74.12	Surface Coating of Metal Parts and Products	Yes	11/19/1985	4/8/2008	5/24/2011
74.13	Aerospace Assembly and Component Manufacturing Operations	Yes	4/15/1986	9/11/2012	Submitted to EPA †
74.11.1	Large Water Heaters and Small Boilers	Yes	9/14/1999	9/11/2012	Submitted to EPA †

Table B-4, District Rules Evaluated for 2014 RACT SIP (cont'd)

VCAPCD Rule	Rule Name	CTG/ACT?	Date First Adopted	Date Last Revised	EPA Approval*
74.11.1	Large Water Heaters and Small Boilers	Yes	9/14/1999	9/11/2012	Submitted to EPA †
74.12	Surface Coating of Metal Parts and Products	Yes	11/19/1985	4/8/2008	5/24/2011
74.13	Aerospace Assembly and Component Manufacturing Operations	Yes	4/15/1986	9/11/2012	Submitted to EPA †
74.14	Polyester Resin Material Operations	Yes	11/24/1987	4/12/2005	2/1/2006
74.15	Boilers, Steam Generators and Process Heaters	Yes	3/28/1989	11/8/1994	2/9/1996
74.15.1	Boilers, Steam Generators and Process Heaters	Yes	5/11/1993	9/11/2012	Submitted to EPA †
74.16	Oilfield Drilling Operations	No	1/8/1991	N/A	4/20/1999
74.17.1	Municipal Solid Waste Landfills	No	3/10/1998	2/9/1999	9/20/2001§
74.18	Motor Vehicle and Mobile Equipment Coating Operations	Yes	1/28/1992	11/11/2008	9/24/2013
74.19	Graphic Arts	Yes	8/11/2002	6/14/2011	9/24/2013
74.19.1	Screen Printing Operations	Yes	6/11/1996	11/11/2003	10/25/2005
74.20	Adhesives and Sealants	Yes	6/8/1993	9/11/2012	8/30/2013
74.21	Semiconductor Manufacturing	No	4/6/1993	N/A	2/29/1996
74.22	Natural Gas-Fired, Central Fan-Type Furnaces	No	11/9/1993	N/A	4/30/1996
74.23	Stationary Gas Turbines	Yes	3/14/1995	1/8/2002	6/3/2003
74.24	Marine Coatings Operations	Yes	3/8/1994	9/11/2012	Submitted to EPA †
74.24.1	Pleasure Craft Coating and Commercial Boatyard Operations	Yes	11/10/1998	1/8/2002	8/13/2002
74.25	Restaurant Cooking Operations	No	10/12/2004	N/A	10/25/2005
74.26	Crude Oil Storage Tank Degassing	No	11/8/1994	N/A	5/6/1996
74.27	Gasoline and ROC Liquid Storage Tank Degassing Operations	No	11/8/1994	N/A	5/6/1996
74.28	Asphalt Roofing Operations	No	5/10/1994	N/A	2/29/1996
74.29	Soil Decontamination Operations	No	10/10/1995	4/8/2008	10/3/2011
74.30	Wood Products Coating	Yes	5/17/1994	6/27/2006	7/16/2008
74.31	Metalworking Fluids and Direct Contact Lubricants	No	11/12/2013	N/A	Submitted to EPA †

* Date of EPA Federal Register Notice of final approval adding rule to SIP.

† The most recent revisions of these rules have been submitted to EPA for inclusion in the SIP but EPA has not taken final action.

§ On this date, Federal Register, Vol. 66, No. 183, page 48355 included EPA approval of Rule 74.17.1 as part of the California State Plan for controlling existing MSW landfills, as set forth in 40 CFR part 60, subpart Cc. The submitted revision to the California 111(d) Plan for controlling MSW landfill gas emissions meets all applicable requirements for approval. This rule was also submitted to EPA for inclusion in the SIP but EPA has taken no action.

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT
2014 RACT ANALYSES

BACKGROUND

Sections 182(b)(2) and 182(f) of the federal Clean Air Act (42 U.S.C. §7511a) require that ozone nonattainment areas implement reasonably available control technology (RACT) for sources that are subject to Control Techniques Guidelines (CTG) issued by EPA and for "major sources" of VOC and 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 emission source categories at major sources of ozone precursor emissions are controlled to a "reasonable" extent, but not necessarily to the more stringent Best Available Control Technology (BACT) or "lowest achievable emission rate" (LAER) levels expected of new or modified major stationary sources.

On June 6, 2013, the EPA issued a proposed rule to address a range of implementation requirements for the 2008 National Ambient Air Quality Standards (NAAQS) for ground-level ozone. Among those are requirements that State Implementation Plans (SIPs) for ozone nonattainment areas provide for RACT. According to the ozone rule, areas classified as moderate or higher ozone nonattainment areas must submit revisions to their SIPs demonstrating that their current rules fulfill 8-hour ozone RACT for all CTG categories and all major, non-CTG sources.

RACT SIPs must contain adopted RACT regulations, certifications where appropriate that existing provisions are RACT, and/or negative declarations that there are no sources in the nonattainment area covered by a specific CTG source category. States must provide notice and opportunity for public comment on their RACT submission even where the state determines to certify that the existing provisions remain RACT or where the state submits a negative declaration. States must also submit appropriate supporting information for their RACT demonstrations.

RACT demonstrations can be made with either RACT determinations or by certifications that previously-required RACT controls represent RACT for the 8-hour ozone standard. Alternatively, air agencies in nonattainment areas may adopt "negative declarations" documenting that the area has no stationary sources in a CTG source category.

CTGs define RACT for existing sources of air pollution. Emission sources covered by CTGs are known as CTG sources. Some CTGs specify the minimum size of sources to which they apply. Where a CTG does not specify the minimum size of the source to which it applies, or there is no CTG for a source category, states are required to apply RACT to sources in nonattainment areas th2at exceed that area's statutory major stationary source threshold for its ozone nonattainment classification. Therefore, since the Ventura County Air Pollution Control District (VCAPCD or "District") is classified a "serious" ozone nonattainment area, a

major source is defined as one with the potential to emit greater than 50 tons per year of volatile organic compounds (VOC) and/or nitrogen oxides (NOx).

Documents useful in establishing RACT include CTGs, Alternative Control Techniques (ACT) guidance, Maximum Achievable Control Technology (MACT) standards, New Source Performance Standards (NSPS), California Suggested Control Measures (SCM) and RACT/Best Available Retrofit Control Technology (BARCT) determinations, regulations adopted in other Districts, and guidance and rules developed by other state and local agencies.

RACT EVALUATIONS

Staff evaluated all District VOC[2] and/or NOx prohibitory rules that apply to CTG source categories and/or major sources of ozone precursors in Ventura County. All rules applicable to CTG source categories were determined to meet or exceed the CTG requirements during the 2006 and 2009 RACT SIP updates, so the rules were not compared to CTG requirements again.[3] However, since some CTGs have not been updated for many years, staff compared District rules to rules adopted by other air districts with higher or "worse" nonattainment classifications, namely the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District (SJVAPCD). Staff also included cost effectiveness in the evaluations. The summaries below discuss the comparisons and provide a determination whether each rule meets RACT as written or if updates are needed.

RULE 59: ELECTRIC POWER GENERATING EQUIPMENT – OXIDES OF NITROGEN EMISSIONS (Last Revised 7/15/1997)

Rule 59 reduces NOx emissions from electric power generating steam boilers with a rated heat input capacity of greater than three hundred (300) million Btu's per hour, and any auxiliary boiler with an electric power generating steam boiler not subject to Rule 74.15, Boilers, Steam Generators, and Process Heaters.

Rule 59 has stricter limits than the equivalent Rule 1135 in the South Coast Air Quality Management District (SCAQMD), which is designated an "extreme" ozone nonattainment area. Although Rule 1135 is still in effect, it could be considered obsolete. SCAQMD now uses an emission trading system, called the RECLAIM system, to regulate NOx from electrical power generation. The RECLAIM system is difficult to compare directly to the emission reductions gained from District Rule 59. Since SCAQMD is an "extreme" nonattainment area, their NOx emission limitations would likely be beyond RACT in order to achieve attainment in a timely manner. RECLAIM credits regularly trade at values greater than $4,000 per ton of NOx, which significantly exceeds the inflation-adjusted RACT threshold of approximately $1,990 per ton of NOx emissions reduced. The April 2014, 12-month rolling average price for one ton of NOx RECLAIM credits was $2,009 (the most recent data available).

[2] District rules use the terms reactive organic compounds or ROC to refer to substances the EPA considers VOC.
[3] Ventura County APCD's 2006 RACT SIP certified that the District's rules met RACT and the 2009 RACT SIP Revision certified that the District's rules met EPA's CTGs issued between 2006 and 2008 and re-certified that all major non-CTG sources of VOC or NOx were covered by RACT Rules.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) does not have a rule specifically limiting emissions of NOx from electric power generating equipment. The SJVAPCD rule that applies to boilers in general, Rule 4306, limits NOx emissions based on heat input rather than net power output. Conducting a unit conversion using an average efficiency for a steam boiler/turbine power system of 36%[4] shows that the Rule 59 limit of 0.10 lbs NOx per Megawatt-hour output is equivalent to the SJVAPCD rule standard limit of 0.011 lb/MMBtu heat input for boilers greater than 20 MMBtu per hour heat input. Therefore, Rule 59 meets RACT and no changes to the rule are required at this time.

RULE 62.6: ETHYLENE OXIDE – STERILIZATION AND AERATION (Adopted 7/16/1991)

Rule 62.6 reduces ethylene oxide emissions from sterilizers using ethylene oxide. The two known, permitted facilities that employ ethylene oxide sterilizers in Ventura County have permit limitations on usage below the RACT applicability thresholds. One source is permitted to consume 150 lbs of ethylene oxide per year and the second source is permitted to consume 88 lbs of ethylene oxide per year. Since EPA has not issued a CTG for ethylene oxide sterilizers, RACT is required for major sources only. The sources subject to Rule 62.6 do not exceed the RACT threshold and therefore Rule 62.6 is not required to meet RACT requirements.

RULE 70: STORAGE AND TRANSFER OF GASOLINE (Last Revised 4/1/2009)

Rule 70 reduces reactive organic compound (ROC) emissions from the storage and transfer of gasoline at bulk plants, terminals, and vehicle dispensing facilities (service stations). The storage of gasoline in containers with more than 40,000 gallons capacity is also regulated by the Rule 71.2, Storage of Reactive Organic Compound Liquids.

The California Air Resources Board (CARB) sets vapor recovery system standards and is responsible for certifying systems to meet those standards. California's local air districts have the primary authority for regulating gasoline dispensing facilities under vapor recovery rules. CARB implemented enhanced vapor recovery requirements during the 10 years starting in 2001. Bay Area Air Quality Management District (BAAQMD) amended its rules applicable to gasoline bulk terminals and plants, Rules 8-33 and 8-39, in April of 2009. The revised rules include lower emission limits (0.4 lb ROC per 1000 gallons transferred vs. 0.8 lb ROC per 1000 gallons transferred in Rule 70). However, the overall cost effectiveness of the emission reductions from the BAAQMD rule amendments is $13,200 per ton of ROC reductions. This is relatively high to be considered RACT and since the sources in the VCAPCD are smaller than those in the BAAQMD, the cost per ton would likely be higher.

Rule 70 was last updated on March 10, 2009. The March 2009 revision added exemptions for fleets using onboard refueling vapor recovery as recommended by EPA. CARB stated in correspondence dated July 31, 2009 that they had reviewed the revised Rule 70 and had no comments. In addition, EPA published a direct final rule in the Federal Register (Vol. 76, No. 20, pages 5277-5280 dated January 31, 2011) that approved revisions to the District

[4] Environmental Protection Agency Combined Heat and Power Partnership Program, "Technology Characterization: Steam Turbines", December 2008, Page 8. Accessed Feb. 18, 2014 at http://www.epa.gov/chp/documents/catalog_chptech_steam_turbines.pdf. A lower efficiency would give a less conservative conversion, indicating that the Rule 59 limit is stricter than the Rule 4306 limit.

portion of the SIP that included the latest revisions to Rule 70. No specifications or performance standards with effective dates after 2009 have been issued. Therefore Rule 70 meets RACT and no changes are required at this time.

RULE 71.1: CRUDE OIL PRODUCTION AND SEPARATION (Last Revised 6/16/1992)

Rule 71.1 reduces ROC emissions from equipment used in the production, gathering, storage, processing, and separation of crude oil and natural gas from any petroleum production permit unit prior to custody transfer.

The SCAQMD has no equivalent provisions similar to the tank battery requirements of Rule 71.1. However, SCAQMD Rule 1178 regulates tanks greater than 20,000-gallon storage capacity at facilities with emissions greater than 20 tons ROC per year. The provisions of Rule 71.1 Section B, Requirements – Storage Tanks, are stricter than the requirements of Rule 1178. Rule 71.1 requires a vapor recovery system on all tanks not eligible for an exemption, where Rule 1178 allows a variety of floating roof configurations not vented to vapor recovery. Only tanks storing low volatility liquids and those in temporary service are exempt from the vapor recovery requirements in Rule 71.1. The District's 2006 RACT SIP contains additional analysis of Rule 71.1, including demonstration that fewer than 6% of over 1,000 permitted tanks in the District are exempt from vapor recovery requirements.

SCAQMD Rule 1148.1 requires 95% control of produced gas that is not recovered whereas Rule 71.1 requires only 90% control of reactive organic compound (ROC) emissions for produced gas not recovered or flared. SJVAPCD Rule 4623 tailors tank requirements based on tank size and vapor pressure of tank constituents, but the strictest requirements allow for vapor recovery systems similar to those allowed by Rule 71.1.

This rule is not associated with a CTG but Ventura County has seven existing major sources of ROC subject to Rule 71.1. A review of the permits for these facilities showed that produced gas is collected into a fuel system, sales gas system, or flare at each facility. The 90% control alternative does not apply to any existing source so the requirement has no effect, and a properly designed and operated flare will achieve 98% destruction efficiency or greater. Any new source would be subject to BACT which would require a greater ROC destruction efficiency than required by Rule 71.1. Therefore, Rule 71.1 does not require revision to meet RACT.

RULE 71.2: STORAGE OF REACTIVE ORGANIC COMPOUND LIQUIDS
(Last Revised 9/26/1989)

Rule 71.2 reduces ROC emissions from equipment used to store crude oil or ROC liquids with a Modified Reid Vapor Pressure (MRVP) greater than 0.5 psia. The rule does not apply to any storage equipment subject to Rule 71.1, to any gasoline storage container with a capacity equal to or less than 40,000 gallons, or to any other storage container with a capacity equal to or less than 5,000 gallons.

SCAQMD Rules 463 (amended 11/4/2011) and 1178 (amended 4/7/2006) and SJVAPCD Rule 4623 (amended 5/19/2005) apply to similar equipment as Rule 71.2. Rule 71.2 includes an exemption for tanks <5,000 gallons, while Rule 4623 applies to all tanks >1,100 gallons. Rule 463 applies to above-ground tanks >19,815 gal and above-ground gasoline tanks with capacities of between 251 and 19,815 gallons. Rule 1178 applies only to tanks at petroleum

facilities with greater than 20 tons of VOC emissions reported in the year 2000 and to tanks with capacities greater than 19,815 gallons. The rules contain many similar provisions and requirements for tanks containing volatile organic liquids. The rules all have minor differences in the detailed requirements. The provisions for fixed roof tanks are equivalent in all of the above-mentioned rules – a pressure-vacuum relief valve or vapor recovery system. Most of the differences relate to floating roof tanks. In some cases, the floating roof tank requirements in Rule 71.2 are stricter than the other districts' rules while the other districts' rules have stricter requirements in other details.

The permitted emissions of the six existing floating roof tanks in Ventura County are less than 14 tons ROC per year. Since they are already controlled to previously approved RACT levels, incremental cost effectiveness of emission reductions would be excessive. The District's 2006 RACT SIP contains additional analysis of Rule 71.2, including demonstration that additional controls on these tanks would not be cost effective. Compliance with the existing rule brings emissions from each of the tanks to below the RACT *de minimis* threshold of 2.74 tons per year (15 pounds ROC per day). Therefore, the existing tanks should be considered *de minimis* and not subject to RACT in this current review. Rule 71.2 does not require revision to meet RACT.

RULE 71.3: TRANSFER OF REACTIVE ORGANIC COMPOUND LIQUIDS
(Last Revised 6/16/1992)

Rule 71.3 reduces ROC emissions from equipment used to transfer ROC liquids with a MRVP greater than or equal to 0.5 psia. The provisions of this rule do not apply to the transfer of gasoline or the transfer of ROC liquids via pipeline.

SCAQMD Rule 462 (amended 5/14/1999) and SJVAPCD Rule 4624 (amended 12/20/2007) apply to similar equipment as Rule 71.3. (Note: Since Rule 71.3 does not apply to the transfer of gasoline, the provisions of Rule 462 that apply to gasoline storage and transfer are covered under District Rule 70.) Although the vapor destruction efficiency requirements are different, all existing sources in Ventura County use vapor recovery systems that capture and return 100% of ROC emissions. Therefore, the vapor destruction requirements of this rule are irrelevant with respect to RACT.

The throughput and vapor pressure thresholds for vapor recovery requirements are different but designed to capture sources where controls will be cost effective. Rules 462 and 4624 require vapor recovery and/or disposal at facilities transferring between 4,000 and 20,000 gallons per day. Rule 71.3 requires vapor recovery for any source that has ever exceeded 20,000 gallons per day or 150,000 gallons per year. While there might be sources that occasionally transfer 4,000 gallons in a day that do not meet the 150,000 gallon annual threshold, it is more likely that sources with less than 4,000 gallons of daily throughput will get captured by the 150,000-gallon annual threshold. In addition, using an annual threshold ensures the annualized cost effectiveness is appropriate. The staff report for the 1990 revision of Rule 71.3 shows the addition of the 150,000-gallon threshold captured 20 additional crude oil loading facilities. The cost effectiveness at this threshold was between $3,660 and $9,240 per ton of ROC emissions reduced (in 1990 dollars), depending if the facility used splash loading or submerged fill. Rule 71.3 exempts liquids with MRVP below 0.5 psia, while Rules 462 and 4624 exempt liquids with true vapor pressure less than 1.5 psia. Therefore, Rule 71.3 meets RACT and does not require revision at this time.

RULE 71.4: PETROLEUM SUMPS, PITS, PONDS AND WELL CELLARS
(Last Revised 6/8/1993)

Rule 71.4 reduces ROC emissions from sumps, pits, ponds and well cellars at facilities where crude oil or petroleum material is produced, gathered, separated, processed, or stored. SCAQMD Rule 1176 (amended 9/13/1996) and SJVAPCD Rule 4402 (amended 12/15/2011) apply to similar equipment as District Rule 71.4.

Rule 71.4 requires covers on allowed sumps that cover 90% of the liquid surface area. The SCAQMD and SJVAPCD rules both require covers on sumps that have very limited gaps at the edges. Otherwise they must cover the liquid completely and have no open hatches, etc. However, Rule 71.4 includes a provision that the cover must not leak, with a leak defined in Rule 71 as 10,000 ppm ROC as methane above background. This provision effectively restricts ROC-containing liquid exposure to the atmosphere and limits emissions by limiting ROC concentrations in exposed air. In addition, Rule 71.4 applies to liquids with significantly lower ROC concentrations (5 mg ROC/L vs 35 mg ROC/L for Rule 4402). Rule 71.4 meets RACT and does not require revision at this time.

RULE 71.5: GLYCOL DEHYDRATORS (Adopted 12/13/1994)

Rule 71.5 reduces ROC emissions from glycol dehydrators anywhere natural gas is dehydrated. SJVAPCD Rule 4408 (adopted 12/19/2002) applies to the same type of equipment as Rule 71.5. The rules are essentially equivalent, but Rule 71.5 has a lower exemption threshold so it applies to all glycol dehydrators in the District. SCAQMD Rule 1148.1 (adopted 3/5/2004) has a similar 95% control requirement on systems handling produced gas, but SCAQMD does not specifically regulate glycol dehydrators. Since Rule 71.5 is equivalent to the SCAQMD and SJVAPCD rules, Rule 71.5 meets RACT and does not require revision at this time.

RULE 74.2: ARCHITECTURAL COATINGS (Last Revised 1/12/2010)

Rule 74.2 reduces ROC emissions from architectural coatings and is applicable to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District. Since EPA has not issued a CTG for architectural coatings, RACT is required for major sources only. The sources subject to Rule 74.2 do not exceed the major-source threshold of 50 tons ROC per year and therefore Rule 74.2 is not required to meet RACT requirements.

RULE 74.3: PAPER, FABRIC AND FILM COATING OPERATIONS
(Last Revised 12/10/1991)

Rule 74.3 reduces ROC emissions from any application process involving the coating of paper, fabric or film. SCAQMD Rule 1128 (amended 3/8/1996) and SJVAPCD Rule 4607 (amended 12/18/2008) apply to the same operations as District Rule 74.3. Their provisions compare to Rule 74.3 with a few minor differences:

- Rule 74.3 allows a 90% overall ROC control option, while Rule 1128 allows 85.5% overall and Rule 4607 allows 90% overall

- Rule 74.3 includes a maximum equivalent emission limit of 120 g/L for high ROC content coatings vented to a control system, while Rule 1128 does not include equivalent restrictions, and Rule 4607 has a less restrictive 265 g/L maximum

- Rule 74.3 does not include specific ROC limits for plastisol coatings but Rules 1128 and 4607 limit plastisol to 20 g/L, however the CTG specifically excludes the application of vinyl plastisol (see page vi of the CTG document EPA-450/2-77-008)

- Rule 74.3 does not restrict the application methods for subject operations but Rule 1128 and Rule 4607 both require transfer efficiencies equivalent to High Volume Low Pressure (HVLP) and 65%, respectively

Upon review of the District sources subject to Rule 74.3, only two sources were identified. The sources use high transfer efficiency application methods (roll and dip coating). New sources with significant potential emissions will be subject to the New Source Review process which will require BACT, including transfer efficiency requirements. Therefore Rule 74.3 satisfies RACT for all District sources.

RULE 74.4: CUTBACK ASPHALT (Last Revised 7/5/1983)

Rule 74.4 reduces ROC emissions from application of rapid cure cutback asphalt for highway or street paving or maintenance, and applies to any person who manufactures, sells, or offers for sale cutback asphalt for such use or application. Rule 74.4 is equivalent to the cutback asphalt restrictions in other air districts in California. All reviewed rules prohibit the use of cutback asphalts with greater than 0.5% organic compounds with boiling points less than 500 °F. Some rules, including Rule 74.4, have exemptions for material used at temperatures less than 50 °F. This rule continues to satisfy RACT and does not require an update at this time.

RULE 74.5.1: PETROLEUM SOLVENT DRY CLEANING (Last Revised 12/4/1990)

Rule 74.5.1 reduces ROC emissions from petroleum solvent dry cleaning operations through emission control, filtration equipment, and operating requirements.

SCAQMD Rule 1102 (amended 11/17/2000) and SJVAPCD Rule 4672 (amended 12/17/1992) apply to similar equipment as District Rule 74.5.1. Rule 4672 has similar emission limits and operational requirements with the addition of a leak inspection and leak repair cycle information label requirement. Rule 1102 includes detailed leak check and repair requirements with time limits for repairing leaks. The Ventura County rule prohibits operating leaking equipment but does not include specific leak check and repair requirements or allowances for operating leaking equipment.

Rule 1102 prohibits operation of transfer machines effective January 1, 2005. District Rule 74.5.1 does not prohibit transfer machines and a review of District permits indicated one transfer machine remains operating in Ventura County. This machine is located in a small retail shop and has permitted potential emissions of less than 1.7 tons ROC per year. However, CTG (EPA-450/3-82-009 1982/09) only applies to large industrial facilities, i.e., those consuming 123,000 liters of solvent per year which is equivalent to emissions of approximately 106 tons of ROC per year.

Any new petroleum solvent dry cleaning operations with significant potential emissions will be subject to the New Source Review process, which will require BACT and a prohibition on transfer machines. Therefore Rule 74.5.1 meets RACT and does not require an update at this time.

RULE 74.5.2: SYNTHETIC SOLVENT DRY CLEANING (Last Revised 5/9/1995)

Rule 74.5.2 reduces ROC emissions from synthetic solvent dry cleaning equipment that does not use percholorethylene through emission control, filtration equipment, and operating requirements.

SCAQMD Rule 1102 (amended 11/17/2000) applies to any dry cleaning equipment not using perchloroethylene solvent. SJVAPCD Rule 4672 applies only to petroleum solvent dry cleaning equipment and so is not applicable to the same sources. Rule 1102 includes detailed leak check and repair requirements with time limits for repairing leaks. Rule 74.5.2 prohibits operating leaking equipment but does not include specific leak check and repair requirements or allowances for operating leaking equipment. Rule 1102 prohibits operation of transfer machines effective January 1, 2005. District Rule 74.5.2 prohibits installation of transfer machines effective December 4, 1990. A review of District permits indicated no transfer machines using synthetic solvent remain operating in Ventura County. Therefore Rule 74.5.2 meets RACT and does not require an update at this time.

RULE 74.6: SURFACE CLEANING AND DEGREASING (Last Revised 11/11/2003)

Rule 74.6 reduces ROC emissions from surface cleaning conducted outside of degreasing tanks (e.g., hand wipe cleaning, cleaning with handheld spray bottles) or using cold cleaning apparatus.

SCAQMD Rules 1122 and 1171 (both amended 5/1/2009) and SJVAPCD Rules 4662 and 4663 (both amended 9/20/2007) regulate similar operations. Rule 74.6 limits general solvent cleaning operations to solvents with ROC content of 25 g/L or less, with higher limits for specific categories such as cleaning electrical and electronic components. Rules 1171, 4662, and 4663 have the same limit for general cleaning operations but include significantly lower limits on ROC content of solvents used for cleaning in specific categories without venting the operation to a control device. All of the rules have similar requirements for control device efficiency when using non-compliant solvents, except Rules 4662 and 4663, which require controlled emissions to be less than emissions from the operation if compliant solvents were used. These rules are all complex with details that vary only slightly between them but no other significant differences exist.

The District's 2009 RACT SIP submittal included a detailed evaluation of Rule 74.6. According to the 2009 evaluation, all of the industrial solvent cleaning operations in Ventura County meet CTG control recommendations, or fall within the exclusions outlined in the guidelines. For example, the CTG for Industrial Cleaning Solvents (EPA 453/R-06-001 2006/09) specifically lists cleaning of electrical and electronic components as a suggested exclusion due to its exemption under BAAQMD Rule 8-4-116. Therefore, the higher ROC content limit in Rule 74.6 for cleaning electronic or electrical apparatus components does not affect the RACT determination. The 2009 evaluation concludes VCAPCD rules governing industrial solvent cleaning operations meet RACT requirements as recommended by the

September 2006 CTG for industrial cleaning solvents. Therefore Rule 74.6 meets RACT and does not require an update at this time.

RULE 74.6.1: BATCH LOADED VAPOR DEGREASERS (Last Revised 11/11/2003)

Rule 74.6.1 reduces ROC emissions from batch loaded vapor degreasers by specifying equipment and operating practice requirements. SCAQMD Rule 1122 (amended 5/1/2009) and SJVAPCD Rule 4662 (amended 9/20/2007) regulate sources similar sources to those regulated by Rule 74.6.1. It should be noted that Rule 74.6.1 does not regulate conveyorized vapor degreasers but no equipment of that type is currently permitted in Ventura County. The rules are all essentially equivalent, although each has minor details in the requirements that the others do not. Therefore Rule 74.6.1 meets RACT and does not require an update at this time.

RULE 74.7: FUGITIVE EMISSIONS OF REACTIVE ORGANIC COMPOUNDS (ROC) AT PETROLEUM REFINERIES AND CHEMICAL PLANTS (Last Revised 10/10/1995)

Rule 74.7 reduces ROC emissions through operational and inspection requirements at petroleum refineries and chemical plants. Historically, only one petroleum refinery and only a few chemical plants have operated in Ventura County. The petroleum refinery has not operated since 1984. Only one facility (Facility #07519) with an SIC code meeting the chemical plant definition remains in the county. Facility #07519 is permitted to emit 2.5 tons of ROC per year from all facility sources, including but not limited to components subject to Rule 74.7. Therefore, Rule 74.7 does not apply to any sources above the RACT threshold of 2.7 tons ROC per year and Rule 74.7 is not required to meet RACT.

RULE 74.8: REFINERY VACUUM PRODUCING SYSTEMS, WASTEWATER SEPARATORS AND PROCESS TURNAROUNDS (Last Revised 7/5/1983)

Rule 74.8 reduces ROC emissions from refinery vacuum producing systems, wastewater separators, and process turnarounds at petroleum refineries. Historically, only a single petroleum refinery operated in the county. The petroleum refinery has not operated since 1984. Rule 74.8 applies only to petroleum refineries. Therefore, Rule 74.7 does not apply to any existing sources in the county and is not required to meet RACT.

RULE 74.9: STATIONARY INTERNAL COMBUSTION ENGINES (Last Revised 11/8/2005)

Rule 74.9 reduces NOx emissions from stationary spark-ignited or diesel internal combustion engines rated at 50 or more horsepower, operated on any gaseous fuel, including liquid petroleum gas (LPG), or liquid fuel, and not subject to the provisions of Rule 74.16.

SCAQMD Rule 1110.2 (amended 9/7/2012) and SJVAPCD Rule 4702 (amended 11/14/2013) regulate sources similar to those regulated by Rule 74.9. The emission limits in Rule 1110.2 are significantly stricter than those in Rule 74.9. The baseline NOx and ROC emission limits in Rule 4702 are largely equivalent to Rule 74.9, though stricter emission limits are becoming effective on a schedule that allows some facilities to defer full compliance until 2017. In addition, Rule 4702 includes a fee option for facilities unwilling to comply with the stricter limits. The fees are capped at the Carl Moyer cost effectiveness threshold which is currently a weighted cost of $17,380 per ton of combined pollutants

reduced. Of this amount, approximately 45% is assigned to NOx emissions, meaning the Carl Moyer cost effectiveness for NOx is approximately $7,820 per ton.

Rule 74.9 exempts agricultural (AG) engines and engines used in oilfield drilling operations. Oilfield drilling engines are not exempt from the rule requirements of Rules 1110.2 and 4702. Moreover, oilfield drilling engines are subject to District Rule 74.16, Oilfield Drilling Operations, which requires electrification where economically feasible (see discussion under Rule 74.16). AG engines are exempt from Rule 1110.2 only if they are not qualified for electrification and they have been replaced with Tier IV engines. Rule 4702 includes separate emission limits for spark-ignited AG engines and regulates compression-ignited AG engines the same as other compression-ignited engines. Although AG engines are exempt from Rule 74.9, the District requires registration of AG engines to track compliance with the Air Resources Board Air Toxic Control Measure (ATCM) for diesel particulates and documents spark ignited engines for emissions inventory purposes. District staff evaluated the AG engine inventory and found no major sources of NOx.

Equipment exempt from Rule 74.9 is covered by other District rules that are RACT equivalent or sources with exempt engines do not reach major source thresholds as noted above for oilfield and AG engines. The NOx and ROC limits for units subject to Rule 74.9 are equivalent to Rule 4702 baseline limits and the fee option value exceeds the inflation-adjusted RACT NOx threshold of approximately $1,990 per ton. Therefore, Rule 74.9 meets RACT and does not require an update at this time.

RULE 74.10: COMPONENTS AT CRUDE OIL AND NATURAL GAS PRODUCTION AND PROCESSING FACILITIES (Last Revised 3/10/1998)

Rule 74.10 reduces ROC emissions through operational and inspection practices and procedures to limit fugitive gas leaks at crude oil and gas production facilities, pipeline transfer stations, and natural gas processing facilities.

SJVAPCD Rule 4409 (amended 4/20/2005) regulates sources similar to those regulated by Rule 74.10. Rule 4409 is essentially the same as Rule 74.10, with similar thresholds for leak classification and similar time requirements for repairs (74.10 is stricter in some categories and 4409 includes an “Extended Repair Period” which makes those categories the same as 74.10). SCAQMD Rule 1173 also regulates similar sources; however, the vast majority of the emission reductions are from the leak reduction requirements in SCAQMD Rule 1173 and are focused on refinery leaks. Since there are no refineries in the District, this rule is not directly comparable to Rule 74.10.

Rule 74.10 employs a two-pronged approach to leak emission reductions. First, sources are required to employ a Leak, Detection and Repair (LDAR) Program to find and fix leaking components. Second, the rule allows District inspectors to issue Notices of Violations when leaks exceeding certain thresholds are detected by PID detectors. The ability of District inspectors to issue NOVs for leaks found dramatically increases rule compliance and provides an incentive for sources to undertake a diligent LDAR program to avoid potential violations. Rule 74.10 therefore meets RACT and does not require an update at this time.

RULE 74.11: NATURAL GAS-FIRED WATER HEATERS (Last Revised 1/12/2010)

Rule 74.11 reduces NOx emissions from residential water heaters and applies to residential water heaters, distributers and installers. The rule's provisions are essentially the same as SCAQMD Rule 1146.2 (amended 5/6/2006) and SJVAPCD Rule 4902 (amended 3/19/2009). There is no CTG applicable to the sources covered by Rule 74.11 and there are no known major sources of NOx subject to this rule in the District. Therefore Rule 74.11 is not required to meet RACT and does not require an update at this time.

RULE 74.11.1: LARGE WATER HEATERS AND SMALL BOILERS (Last Revised 9/11/2012)

Rule 74.11.1 is a point-of-sale rule that reduces NOx emissions from large water heaters and small boilers that are sold, offered for sale, or installed in Ventura County through certain requirements and limits.

SCAQMD Rule 1146.2 (amended 5/5/2006) and SJVAPCD Rule 4308 (amended 11/14/2013) apply to similar sources as Rule 74.11.1. The provisions of Rule 4308 are essentially the same as rule 74.11.1. All three rules have equivalent emission limits as ppm NOx in source exhaust, although the rules vary in expression of limits based on heat input or heat output. Rule 1146.2 includes additional requirements that require existing sources more than fifteen years old be retrofitted or replaced if they do not meet emission limits that were effective January 1, 2000. Moreover, since the SCAQMD is classified an "extreme" nonattainment area, they must go beyond RACT requirements to meet ozone standards. The SJVAPCD rule was amended in late 2013 and does not include provisions applicable to existing units. Since Rule 74.11.1 is equivalent to Rule 4308, Rule 74.11.1 meets RACT and does not require an update at this time.

RULE 74.12: SURFACE COATING OF METAL PARTS AND PRODUCTS (Last Revised 4/8/2008)

Rule 74.12 reduces ROC emissions by specifying ROC content limits in coatings used to coat metal parts and products and work practice requirements. SCAQMD Rule 1107 (amended 1/6/2006) and SJVAPCD Rule 4603 (amended 9/17/2009) apply to similar sources as Rule 74.12. The coating ROC content restrictions are mostly equivalent, with Rule 74.12 including lower limits on a few specialty coatings. While minor differences in work practice requirements and exemptions exist, the differences do not impact the RACT determination. The District's 2009 RACT SIP submittal includes a detailed evaluation of Rule 74.12 and includes additional details on how the rule meets the 2008 CTG for this source category. Rule 74.12 has equivalent or stricter requirements than Rule 1107 and Rule 4603, so Rule 74.12 meets RACT and does not require an update at this time.

RULE 74.13: AEROSPACE ASSEMBLY AND COMPONENT MANUFACTURING OPERATIONS (Last Revised 9/11/2012)

Rule 74.13 reduces ROC emissions from the manufacturing, assembling, coating, masking, bonding, paint stripping, and surface cleaning of aerospace components and the clean-up of equipment associated with these operations.

SCAQMD Rule 1124 (amended 9/21/2001) and SJVAPCD Rule 4605 (amended 6/16/2011) apply to sources similar to those subject to Rule 74.13. Rule 74.13 limits the emissions of ROC from the application of coatings or adhesives on aerospace components. This rule contains limits on the ROC content of coatings, adhesives and cleaners used at aerospace component manufacturing operations. The ROC control requirements of this rule are equivalent to SCAQMD Rule 1124, Aerospace Assembly and Component Manufacturing Operation, with a few variations in limits for specialty coatings or adhesives. In addition, Rule 74.13 requirements exceed those of the EPA's Air Toxic Rule 40 CFR Part 63 Subpart GG - *National Emission Standards for Aerospace Manufacturing and Rework Facilities*, dated December 8, 2000.

The material ROC content limits in Rule 74.13 are equivalent to all corresponding VOC content limits in the CTG. District staff determined the CTG includes limits on sixteen additional specialty coatings not addressed in Rule 74.13. However, the CTG for aerospace manufacturing and rework operations applies to sources in serious nonattainment areas that have the potential to emit greater than or equal to 25 tons per year of ROC. There are no aerospace manufacturing or rework facilities in the District with permitted ROC emissions greater than 25 tons per year ROC. Rule 74.13 applies to sources that emit greater than 200 pounds ROC in any consecutive twelve-month period. Therefore, Rule 74.13 exceeds RACT requirements and no changes are required at this time.

RULE 74.14: POLYESTER RESIN MATERIAL OPERATIONS (Last Revised 4/12/2005)

Rule 74.14 reduces ROC emissions from operations that manufacture products from or otherwise use polyester resin material. ROC emissions from this manufacturing process are controlled by limiting loss rate, monomer ROC content, application technique, or by requiring emission control equipment. Limits are also placed on the ROC content of cleaning materials. This rule does not apply to sources in a CTG category and there are no major sources of NOx or ROC in the District subject to this rule. Therefore, RACT analysis and RACT compliance are not required.

RULE 74.15: BOILERS, STEAM GENERATORS AND PROCESS HEATERS (Last Revised 11/18/1994)

This rule reduces NOx emissions from boilers, steam generators and process heaters used in all industrial, institutional and commercial operations, except utility electric power generating units and any auxiliary boiler used with a utility electric power generating unit and water heaters.

SCAQMD Rule 1146 (amended 9/5/2008) and SJVAPCD Rule 4320 (amended 10/16/2008) apply to sources similar to those subject to Rule 74.15. Rule 74.15 prohibits NOx and CO emissions in excess of 40 ppm and 400 ppm, respectively, from all subject sources except those meeting a low use exemption. Both Rule 1146 and Rule 4320 include tables of NOx limits for different categories of combustion sources. The NOx emission limits range from 5 ppm for larger units to 25 ppm NOx for units fired on landfill gas. The limits are all expressed in ppm NOx on a dry basis and corrected to 3% oxygen, so they are directly comparable.

According to the SCAQMD board materials associated with the adoption of Rule 1146 in 2008, cost effectiveness estimates range from $10,100 to $24,900 per ton for units complying

with the 9 ppm NOx limit (ultralow-NOx burner) and $13,000 to $30,800 per ton for units complying with the 5 ppm NOx limit (SCR). For atmospheric boilers, the cost effectiveness of complying with the 12 ppm NOx limit is estimated to range from $17,300 to $32,800. These cost effectiveness values are far beyond the cost effectiveness guidelines for RACT of approximately $1,990 per ton of NOx reduced in inflation-adjusted 2013 dollars. This indicates the current cost effectiveness of these technologies exceeds RACT guidelines. Since the baseline emission limits and compliance options are similar for all three rules, Rule 74.15 meets RACT and does not require an update at this time.

RULE 74.15.1: BOILERS, STEAM GENERATORS AND PROCESS HEATERS (Last Revised 9/11/12)

This rule is a point-of-sale rule that reduces NOx emissions by requiring large water heaters and small boilers that are sold, offered for sale, or installed in Ventura County to meet certain requirements.

SCAQMD Rule 1146.1 (amended 9/5/2008) and SJVAPCD Rule 4320 (amended 5/19/2011) apply to sources similar to those subject to Rule 74.15.1, combustion sources with maximum design heat input less than 5 MMBtu/hr. Rule 74.15.1 prohibits NOx and CO in excess of 40 ppm and 400 ppm, respectively, from subject sources with annual heat input greater than 1.8×10^9 Btu. Both Rule 1146.1 and Rule 4320 include similar limits as baseline limits for all subject units not eligible for a low use exemption. All three rules include a compliance option for units with total annual fuel use less than 1.8×10^9 Btu. Such units may comply with the rule by performing regular tune ups (twice per year, with different specific scheduling requirements) in accordance with rule requirements.

Rule 1146.1 includes much stricter NOx limits on all subject sources, however the SCAQMD staff report associated with the adoption of those limits indicates the cost effectiveness ranges from $14,400 to $33,500 per ton of NOx emissions reduced. These cost effectiveness values are far beyond the cost effectiveness guidelines for RACT of approximately $1,990 per ton of NOx reduced in inflation-adjusted 2013 dollars. Rule 4320 includes similar limits for new units only; however they are not effective for many types of sources (schools, refineries, and moderate use units) until January 1, 2016. Since the baseline emission limits and compliance options are similar for all three rules, Rule 74.15.1 meets RACT and does not require update at this time.

RULE 74.16: OILFIELD DRILLING OPERATIONS (Adopted 1/8/1991)

Rule 74.16 reduces NOx emissions by requiring oilfield drilling rigs to be powered by electric utility grid power. The rule requires the District to grant an exemption from this requirement in cases where the cost of bringing grid power to the drilling site makes electric drilling economically infeasible. In cases where the District grants such an exemption, Rule 74.16 requires the diesel engines used in oilfield drilling rigs to meet NOx limits equivalent to Tier 1 diesel engines. No oil well drilling rigs currently hold a District Permit to Operate. To obtain a Permit to Operate, oil well drilling engines would have to comply with more stringent BACT requirements pursuant to Rule 26, New Source Review. By definition, BACT for internal combustion engines is at least as stringent as RACT.

California law adopted after adoption of Rule 74.16 preempts air districts from regulating the portable diesel engines used in oilfield drilling rigs if they are registered under the statewide

Portable Equipment Registration Program (PERP). As a result, all oil well drilling rigs operating in Ventura County have opted to comply with the PERP regulation instead of obtaining a District air permit. Therefore, for all practical purposes, the requirements of Rule 74.16 do not apply and the rule is not necessary to implement RACT at oilfield drilling operations.

RULE 74.17.1: MUNICIPAL SOLID WASTE LANDFILLS (Last Revised 2/9/1999)

Rule 74.17.1 reduces fugitive ROC emissions from municipal solid waste landfills by means of landfill gas collection and control systems. All municipal solid waste landfills in Ventura County are subject to either the federal New Source Performance Standard (40 CFR part 60 subpart WWW) or Rule 74.17.1, as applicable. SCAQMD Rule 1150.1 (amended 4/1/2011) and SJVAPCD Rule 4642 (amended 4/16/1998) do not contain more stringent requirements. Therefore, Rule 74.17.1 meets RACT and no changes are required at this time.

RULE 74.18: MOTOR VEHICLE AND MOBILE EQUIPMENT COATING OPERATIONS (Last Revised 11/11/2008)

Rule 74.18 limits ROC emissions from the application of automotive refinish coatings. This rule contains limits on the ROC content of refinish coatings used to coat both repaired auto bodies and entire vehicles, and contains ROC content limits on cleaners used for surface preparation and application equipment cleanup.

The California Air Resources Board amended the statewide Suggested Control Measure (SCM) for Automotive Coatings on October 20, 2005. On November 11, 2008, the District adopted the SCM. The vast majority of the emission reductions from this SCM results from auto body shops switching from solvent-based color base coats to new waterborne color base coats. Other provisions of the SCM and Rule 74.18 include new ROC limits of primer sealers, specialty coatings, and cleaning solvents used for cleaning application equipment. Therefore, Rule 74.18 meets RACT and no changes are required at this time.

RULE 74.19: GRAPHIC ARTS (Last Revised 6/14/2011)

Rule 74.19 reduces ROC emissions from the use of inks, fountain solutions, coatings, adhesives, and cleaners used at graphic arts operations through limits on the ROC content of inks, coating, adhesives, fountain solutions, and solvent cleaners. The District's 2009 RACT SIP submittal includes a detailed evaluation of Rule 74.19 and includes additional details on how the rule meets the 2006 CTG for this source category. On June 14, 2011, the District adopted new lower ROC content limits in Rule 74.19 for some fountain solutions and cleaning solutions used in this source category. The new limits are equivalent to or stricter than limits in SCAQMD Rule 1130 (amended 10/8/1999), SJVAPCD Rule 4607 (amended 12/18/2008) and, for the solvent cleaning aspects of the rule, SCAQMD Rule 1171 (amended 5/1/2009). The requirements of Rule 74.19 meet RACT and no further changes are required.

RULE 74.19.1: SCREEN PRINTING OPERATIONS (Last Revised 11/11/2003)

Rule 74.19.1 reduces ROC emissions from the use of inks, coatings, adhesives, and cleaners used at screen printing operations. The rule specifies limits on the ROC content of inks, coating, adhesives and fountain solutions, whereas ROC emissions from cleaning solvents are limited by ROC content and ROC composite vapor pressure requirements. There is no CTG

for this source category and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.20: ADHESIVES AND SEALANTS (Last Revised 9/11/2012)

Rule 74.20 reduces ROC emissions from the use of adhesives, sealants, adhesive primers, sealant primers and cleaning solvents used at bonding operations. Rule requirements limit ROC emissions by limiting the ROC content of adhesives, sealants, primers, and cleaners.

The ROC control requirements of this rule are equivalent to SCAQMD Rule 1168 (amended 1/7/2005) and SJVAPCD Rule 4653 (Amended 9/16/2010) with some minor differences. For example, the SCAQMD and SJVAPCD rules list a number of different or additional categories of adhesives, sealants and primers with limits in the range of 500 to 850 g/L. Those materials would be subject to the general limit of 250 g/L in Rule 74.20. The SCAQMD and SJVAPCD rules include stricter limits on a few material categories, however the differences are minor, such as ABS welding limits of 400 g/L in Rule 74.20 vs 325 g/L in the other rules or Plastic Welding Primer limits of 650 g/L in Rule 74.20 vs 550 g/L in Rule 1168. Rule 74.20 allows the use of non-compliant materials if the source uses add-on controls with overall removal efficiency of 85%, which is equivalent to or stricter than the control requirement for Rule 1168 (80% overall control) and Rule 4653 (85% overall control).

There are no major sources in this source category in Ventura County. The District's 2009 RACT SIP submittal includes a detailed evaluation of Rule 74.20 and demonstrates that all sources in the District using industrial adhesives have emissions below the CTG applicability threshold of 15 pounds ROC per day or 2.74 tons ROC per year. Any sources that were constructed in the District after that analysis would be subject to new source review and BACT requirements, which are stricter than RACT by definition. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.21: SEMICONDUCTOR MANUFACTURING (Adopted 4/6/1993)

Rule 74.21 reduces ROC emissions from semiconductor manufacturing operations through various operational requirements and solvent concentration limits. This rule does not apply to sources in a CTG category and there are no major sources of ROC in Ventura County subject to this rule. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.22: NATURAL GAS-FIRED, FAN TYPE CENTRAL FURNACES (Adopted 11/9/1993)

Rule 74.22 reduces ROC emissions by prohibiting the sale and installation of forced air space heaters that do not meet specified NOx limits. There is no CTG for this equipment and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.23: STATIONARY GAS TURBINES (Last Revised 1/8/2002)

Rule 74.23 reduces NOx emissions from stationary turbines with rated output greater than 0.3 MW fueled with gaseous or liquid fuels. This applicability limit is the same as SCAQMD Rule 1134 (amended 8/8/1997) and SJVAPCD Rule 4703 (amended 9/20/2007). There are

18 existing turbines in the District subject to Rule 74.23. Half of the existing turbines are exempt based on a limit of less than 200 annual hours of operation. Eight (8) of the remaining turbines are limited by air permit conditions to BACT emission levels. The final remaining unit has a specific permit limit due to its configuration and inability to cost-effectively install add-on controls such as selective catalytic reduction. This unit is required to use water injection, and the facility agreed to over control the other, larger turbine on site to achieve additional NOx reductions beyond RACT on average. Since all other existing units subject to Rule 74.23 are controlled at BACT levels and any new sources would be required to install BACT emission controls, Rule 74.23 meets RACT and no update is required at this time.

RULE 74.24: MARINE COATING OPERATIONS (Last Revised 9/11/2012)

Rule 74.24 reduces ROC emissions from coating and cleaning solvents used to coat marine or fresh water vessels, excluding boatyard repair facilities and marinas. Rule requirements limit ROC emissions by limiting the ROC content of topcoats and primers. Emissions of ROC from cleaners are also controlled by limiting the ROC content of surface prep cleaners and application equipment cleaners.

The ROC control requirements of this rule are equivalent to South Coast AQMD Rule 1106 (amended 1/13/1995) with some minor differences. Rule 74.24 also meets the requirements for the 1996 CTG for Ship Building and Ship Repair Operations. This rule therefore meets RACT and no update is needed at this time.

RULE 74.24.1: PLEASURE CRAFT COATING AND COMMERCIAL BOATYARD OPERATIONS (Last Revised 1/8/2002)

Rule 74.24.1 reduces ROC emissions from the use of coatings and cleaning solvents used to coat marine or fresh water vessels at commercial boatyard repair facilities and marinas. This rule also contains a sales prohibition for noncomplying coatings sold at marine stores that sell pleasure craft coatings. Rule requirements limit ROC emissions through ROC content limits on topcoats and primers. Emissions of ROC from cleaners are also controlled by limits on the ROC content of surface prep cleaners, the ROC composite vapor pressure of cleaning solvents, and requiring the use of enclosed spray gun washers. Also, this rule requires use of high transfer efficiency spray equipment such as HVLP spray equipment.

The ROC control requirements of this rule are equivalent to South Coast AQMD Rule 1106.1 (amended 2/12/1999) with some minor differences. Some of the operations subject to this rule are included in the 2008 CTG for Miscellaneous Metal and Plastic Parts Coatings, and one or two sources in Ventura County exceed the CTG applicability threshold. The number of sources subject to the CTG is unclear since the sources in question also coat pleasure craft hulls and/or topside structures made of wood so emissions from those operations are not subject to the CTG.

Staff analysis of Rule 74.24.1 identified several coating types, antifoulant coatings and certain high gloss topcoats, where the Rule 74.24.1 maximum ROC content exceeds the maximum in

CTG Table 5. However, EPA acknowledged in a June 1, 2010 memorandum[5] that the ROC content limits in the CTG might be unacceptable to the regulated industry and states have flexibility in determining RACT. In discussions with EPA Region 9 staff about the RACT determination for this rule, Region 9 staff indicated they believed coatings meeting the CTG limits are now readily available and strongly recommended revising Rule 74.24.1 to meet the CTG limits to ensure the rule meets RACT for the 2008 ozone NAAQS.

District staff examined inspection reports for the pleasure craft coating operations potentially subject to the CTG in the District. The inspection reports listed the coatings on site at the facilities and the ROC content of the coatings. The inspection reports indicated both of the facilities currently use a mix of antifoulant coatings and one facility uses a mix of gloss topcoat coatings, some compliant with the CTG limits and some not compliant with the CTG limits.

For the antifoulant coatings on aluminum substrates, District staff believes the limit of 580 grams ROC per liter of coating less water and exempt compounds (hereafter referred to merely as g/L) is a typographical error from the original adoption of the rule. The CTG limit for this coating category is 560 g/L and it would be difficult to consistently discern the difference between coatings with these two VOC contents using EPA Test Method 24.

For antifoulant coatings on other substrates, the CTG limit is 330 g/L and the Rule 74.24.1 limit is 400 g/L. One boatyard in the district used six different antifoulant coatings and all were compliant with the CTG limit according to the labels on the containers. The other, larger boatyard used five different antifoulant coatings, three of which were compliant with the CTG limit and two of which were compliant only with the Rule 74.24.1 limit. Staff contacted the boatyard operator that uses the high-ROC antifoulant coatings. He stated the higher solvent coatings are ablative coatings and such coatings that comply with the 330 g/L limit are not available. If the District lowers the limit, he believes the commercial boat operators that use the ablative coatings would take their boats elsewhere to avoid the additional cost to strip the ablative coating and apply a compliant hard antifoulant. The additional labor would add up to $20,000 to the cost of recoating the boat. In addition, the ablative antifoulant coatings are self-polishing, resulting in a smoother hull for the boat and therefore reduced fuel use.

Topcoats are classified differently in the Rule 74.24.1 and the CTG. Rule 74.24.1 includes separate ROC content limits for one-component topcoats (490 g/L) and two component topcoats (650 g/L). The CTG includes separate limits for high gloss topcoats (420 g/L, high gloss defined as ≥ 85% reflectance at 60°) and extreme high gloss topcoats (490 g/L, extreme high gloss defined as ≥ 95% reflectance at 60°). While the limits and classifications are not directly comparable, it is apparent the Rule 74.24.1 limits allow higher ROC content than the CTG in many coatings.Only one facility above the CTG threshold in Ventura County applies topcoats as defined in the CTG. The list of topcoats used at the facility includes six coatings, all of which meet the CTG limit for high gloss coatings except one. The non-compliant

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[5] Control Technique Guidelines for Miscellaneous Metal and Plastic Part Coatings Industry Request for Reconsideration, United States Environmental Protection Agency, Stephen D. Page, Director, Office of Air Quality Planning and Standards, June 1, 2010, http://www.noticeandcomment.com/EPA-Memo-Control-Technique-Guidelines-for-Miscellaneous-Metal-and-Plastic-Part-Coatings-Industry-Request-fn-38627.aspx

coating is Awlgrip Topcoat, a two-component extreme high gloss linear polyester polyurethane coating with 650 g/L ROC content. This is a high-quality coating popular with pleasure craft owners due to its extreme high gloss, durability and long life. Based on discussion with knowledgeable staff, the Awlgrip Topcoat is a primary reason the District raised the ROC limit for two-component topcoats in 2002. At that time, no coatings were available with equivalent application and finish properties with ROC content compliant with the CTG limits.

Staff conducted research to determine if coatings are available to meet the CTG ROC limits and satisfy the demand for the qualities of the Awlgrip Topcoat. SCAQMD staff indicated they have no knowledge of problems with compliance with the limits in Rule 1106.1 (equivalent to the CTG limits). No variances have been requested in recent years. Staff conducted interviews with boatyard staff in Ventura County, San Diego County, and the jurisdiction of SCAQMD. The shipyards in SCAQMD jurisdiction indicated they used compliant coatings only, but could not compare the performance directly with the Awlgrip Topcoat since it is illegal at their area. Staff at a San Diego boatyard stated the majority of their topcoat jobs use Awlgrip Topcoat or a competing product from Sterling Lacquer Manufacturing (no ROC content information available). He said Alexseal Premium Topcoat 501 is also competitive and has lower ROC content (590 g/L), however this is still not compliant with the CTG limits. He also stated Awlgrip provides very good technical support for their products.

Staff interviewed the Ventura County boatyard operator that uses the Awlgrip Topcoat. He stated the boatyard uses relatively small amounts of topcoat, approximately 400 gallons per year, and approximately half of that is the Awlgrip Topcoat on pleasure craft. He stated the most-used paint for commercial boats is DuPont Imron 2.1 HG, which is compliant with all limits at 315 g/L ROC content. However, he believes no yacht-quality high solids coating is available. When the District adopted the original Rule 74.24.1 in 1999, the boatyard switched to the high solids topcoat Awlgrip developed for the Southern California market. He stated the coating was very difficult to apply properly and it dried slowly, resulting in failure to achieve acceptable results. Failure often occurred due to dew formation on uncured coating which disrupted the gloss. This caused re-application of the coating, up to four times in some cases. The increase in coating applications resulted in increased emissions due to additional coating use.

The Ventura County boatyard operator stated that all yacht customers request Awlgrip Topcoat. He said many yacht owners bring their boats to Ventura from Alaska, Washington and San Francisco to take advantage of the ability to paint their yachts in the winter. If the District prohibits the use of the Awlgrip Topcoat by lowering the ROC limit in Rule 74.24.1, he believes the yacht owners will take their business elsewhere (such as Santa Barbara or San Diego). He stated his business has grown due to the ability to provide the service demanded by his clients. The commercial operators demand ablative antifoulant coatings and the yacht owners demand Awlgrip Topcoat. He expressed great concern that his business will be negatively impacted if the limits are lowered.

Staff reviewed online forums for yacht and sailing enthusiasts to determine if the Awlgrip Topcoat enjoyed a reputation above and beyond the competition, indicating feasible compliant coatings do not exist. While the forums do not include VOC content data, it was evident that several topcoat systems are available and each has defenders and detractors.

Awlgrip topcoats are very popular, but competing products include Alexseal, Sterling, DuPont Imron, and International Perfection paint systems. The Awlgrip website lists a product (Awlgrip HS Topcoat) that claims similar performance to the two-component linear polyurethane Awlgrip Topcoat. Awlgrip HS Topcoat is a three-component system with the mixed coating VOC content of 420 g/L which is compliant with the CTG limit. However, the online forums have little to no information on the performance and usability of the Awlgrip HS Topcoat indicating this product has not generated a significant reputation within the pleasure craft community.

Staff discovered a single water-based linear polyurethane topcoat, System Three WR-LPU Linear Polyurethane Topcoat. The Material Safety Data Sheet for this coating lists an ROC content of 105-120 g/L for the polyurethane dispersion and 370 g/L for the crosslinker (a small fraction of the overall volume when combined with the polyurethane dispersion). However, this coating system does not qualify as a high gloss or extreme high gloss topcoat, so it is not comparable with the solvent-based topcoats discussed elsewhere in this analysis.

Staff concluded from this research that the extreme high gloss linear polyester polyurethane coatings on the market are not compliant with the CTG VOC limits. These coatings enjoy a strong positive reputation in the pleasure craft community with a reputation for superior appearance, durability and service life. The competing aliphatic polyurethane topcoat products from DuPont and International Paint Company have a different chemistry which yields lower performance on original gloss, gloss retention, and durability (resistance to damage such as scuffs, scratches and chips).

Staff contacted a representative of Awlgrip and asked about a compliant version of the linear polyurethane Awlgrip Topcoat G/H. He stated the development of a lower VOC linear polyester polyurethane topcoat suitable for spray application was ongoing. He stated the current Awlgrip Topcoat G/H is compliant with the 490 g/L limit when mixed for hand application (brush or roll) due to the lower VOC content of the activator component used for hand application process. However, the coating mixed for spray application remains non-compliant. The other linear polyester polyurethane topcoats on the market also exceed the CTG ROC content limits. Therefore, there is justification for retaining the 650 g/L VOC limit on two component topcoats currently in Rule 74.24.1.

Rule 74.24.1 achieves greater emission reductions than would occur if the District adopted the CTG limits alone. The CTG, with its applicability threshold of 2.7 tons ROC per year, applies only to one or possibly two sources in Ventura County with permitted (controlled) annual ROC emissions totaling up to 15.5 tons. Rule 74.24.1 applies to two or three additional sources with permitted (controlled) emissions totaling up to 6.6 tons ROC per year due to the rule's lower applicability threshold (200 lb/year vs 2.7 tons per year for the CTG). The CTG states on page 40 the recommendations in the CTG will reduce emissions by approximately 35%. Therefore, the expanded applicability of Rule 74.24.1 generates emission reductions of approximately 3.6 tons ROC per year.

In addition, Rule 74.24.1 applies to coatings applied to pleasure craft parts and structures made of wood. Since the permitted facilities are not required to track the amount of coatings used on wood substrates, it is difficult to determine the impact of this aspect of the rule. Rule 74.24.1 includes a sales prohibition to reduce emissions from non-permitted users of pleasure craft coatings (e.g. individual hobbyists), a source also not subject to the CTG requirements.

According to a 1992 survey used in the development of the rule, approximately 19% of total marine coatings sold in Ventura County were sold retail and not applied by permitted sources. Since the total controlled permitted inventory is 18.9 tons ROC per year, the controlled non-permitted inventory should be approximately 4.4 tons ROC per year. Again using the 35% control estimate from the CTG, Rule 74.24.1 reduces ROC emissions a further 2.4 tons per year.

The more comprehensive coating ROC restrictions in Rule 74.24.1 reduce ROC emissions at least 6 tons per year beyond the reductions that would be achieved by adopting the CTG guidelines alone. This indicates the Rule 74.24.1 ROC limits on pleasure craft coatings are more comprehensive and more effective at reducing emissions than the baseline recommendation in the CTG.

Rule 74.24.1 was originally adopted in November 1998 with the same ROC content limits (with the exception of the aluminum substrate antifoulant coatings) that were later included in the CTG. Due to feedback from the regulated community, the District revised Rule 74.24.1 in January 2002. The amendments included the current ROC limits on topcoats and antifoulant coatings along with new restrictions on spray gun cleaning operations and cleaning solvent vapor pressure to offset the increase in emissions from the relaxed ROC content limits. According to the January 8, 2002 Staff Report, the ROC emissions were expected to increase by 900 pounds per year due to the relaxation of ROC limits on two-component topcoats and antifoulant coatings. However, this increase was offset by a reduction of ROC emissions of 1,900 pounds due to the new restrictions on spray gun cleaning and solvent vapor pressure. Therefore, the current requirements of Rule 74.24.1 reduce emissions by an addition 0.5 tons per year of ROC beyond the baseline CTG requirements.

On August 13, 2002, EPA published a direct final rule in the Federal Register[6] approving revisions to the California SIP, including District Rule 74.24.1 as amended in January 2002. In the discussion of the SIP revisions, the Federal Register notice states "To conclude, the submitted Rule 74.24.1 does not interfere with reasonable further progress or attainment. The net effect of amendments to the rule is to reduce ROC emissions."

The Federal Register notice refers to the April 2002 EPA Technical Support Document[7] (TSD) prepared for the notice of direct final rulemaking. The TSD notes that EPA had not, at that time, produced a CTG for pleasure craft coating and commercial boatyard operations. Therefore, District Rule 74.24.1, along with SCAQMD Rule 1106.1 and San Diego County Air Pollution Control District Rule 67.18 provided a preliminary definition of RACT. The TSD includes no recommendations for revisions and finds no deficiencies in Rule 74.24.1. Although this EPA action occurred prior to the publication of the CTG update with pleasure craft coating guidelines, the ROC limits referenced in the CTG are taken directly from SCAQMD Rule 1106.1 cited above. In addition, the CTG refers to the 2002 version of Rule

[6] "Revisions to the California State Implementation Plan, South Coast Air Quality Management District, Ventura County Air Pollution Control District; Direct final rule," 67 Federal Register 156 (13 August 2002), pp. 52611 - 52615.

[7] J. S. Wamsley, Technical Support Document for EPA's Notice of Direct Final Rulemaking, USEPA Region IX Air Division, April 2002. Accessed May 6, 2014. Link to TSD available at http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/8243BA552E89656088256C17007BDE31?OpenDocument

74.24.1 as one of the three California districts with pleasure craft coating rules. Although the SCAQMD rule was noted as the strictest, the CTG does not indicate EPA believed Rule 74.24.1 did not satisfy RACT.

As stated in its introduction, the CTG provides recommendations for state and local air pollution control agencies to consider in determining RACT. Rule 74.24.1 applies to a broader category of source operations than the pleasure craft coating operations covered by the CTG, has a lower applicability threshold, and includes a sales prohibition to reduce emissions from non-permitted users of pleasure craft coatings (e.g. individual hobbyists). In addition, during the 2002 rule revisions spray gun cleaning operation and solvent vapor pressure requirements were added to offset the increase in emissions from the higher coating ROC content limits requested by affected sources. Combined, these extra requirements increase the ROC reductions by 65% over the reductions expected by implementing the CTG requirements even considering the higher ROC limits for the topcoat and antifouling coatings. Therefore, the District considers Rule 74.24.1 RACT as written and no updates are required at this time.

RULE 74.25: RESTAURANT COOKING OPERATIONS (Adopted 10/12/2004)

Rule 74.25 reduces ROC and particulate matter emissions from conveyorized charbroilers. There is no CTG for this equipment and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.26: CRUDE OIL STORAGE TANK DEGASSING OPERATIONS (Adopted 11/8 1994)

Rule 74.26 reduces ROC emissions by prohibiting the venting of ROC vapors to the atmosphere from above-ground tanks used to store crude oil or produced water. When such tanks are undergoing maintenance or being decommissioned, the rule requires ROC vapors to be treated rather than released to the air.

Rule 74.26 was evaluated by the District in 2004 in an "All Feasible Measures" (AFM) analysis conducted pursuant to California Health and Safety Code Section 40914. This review was cited in the District's 2006 RACT SIP as approved by EPA. The conclusions of the 2004 AFM analysis remain valid. SCAQMD Rule 1149 (amended 5/2/2008) has a lower threshold of ROC for degassed tanks, 5,000 ppmv versus 10,000 ppmv for Rule 74.26. However, the 2004 AFM analysis states the incremental cost to control emissions from 10,000 ppmv to 5,000 ppmv would be excessive due to the large amount of time and dilution air needed to reduce the concentration a further 50%. SCAQMD was able to justify the lower limit due to the much more lax conditions of Rule 1149 prior to its amendment and a cost effectiveness threshold of $13,159 per ton of ROC reduced, much higher than what would be considered for RACT in Ventura County.

SCAQMD also lowered the tank size applicability thresholds for Rule 1149 in its 2008 revision. The District's 2004 AFM analysis also addressed the tank size applicability threshold cost effectiveness for Rule 74.26. Assuming a ROC vapor density of 0.004 lb/gallon of tank volume and a control efficiency of 95%, the cost effectiveness to control degassing of a 500-bbl tank ranges from $18-$25 per pound of ROC reduced (equivalent to $36,000 - $50,000 per ton). Smaller tanks, such as the 500-gallon level regulated by Rule

1149, would have worse cost effectiveness due to the fixed costs of tank degassing operations increasing relative to tank size. Due to the high cost of reducing the tank size and/or ROC concentration thresholds, Rule 74.26 meets RACT and no update is necessary at this time.

RULE 74.27: GASOLINE AND ROC LIQUID STORAGE TANK DEGASSING OPERATIONS (Adopted 11/8 1994)

Rule 74.27 reduces ROC emissions by prohibiting the venting of ROC vapors to the atmosphere from any gasoline storage tank that has a storage capacity greater than 5,000 gallons and any storage tank that has a storage capacity greater than 5,000 gallons that stores ROC liquids, excluding petroleum liquids, having a true vapor pressure equal to or greater than that determined by: TVP @ 68 °F (psia) = 2.3 + 23,000/V, where V is the volume of the tank in gallons. When such tanks are undergoing maintenance or being decommissioned, the rule requires ROC vapors to be treated rather than released to the air.

Rule 74.27 was evaluated by the District in 2004 in an "All Feasible Measures" (AFM) analysis conducted pursuant to California Health and Safety Code Section 40914. This review was cited in the District's 2006 RACT SIP as approved by EPA. The conclusions of the 2004 AFM analysis remain valid. SCAQMD Rule 1149 (amended 5/2/2008) has a lower ROC threshold, 5,000 ppmv versus 10,000 ppmv for Rule 74.27. However, the 2004 AFM analysis states the incremental cost to control emissions from 10,000 ppmv down to 5,000 ppmv would be excessive due to the large amount of time and dilution air needed to reduce the concentration a further 50%. SCAQMD was able to justify the lower limit due to the much more lax conditions of Rule 1149 prior to its amendment and a cost effectiveness threshold ($13,159 per ton of ROC reduced) much higher than what would be considered RACT in Ventura County.

SCAQMD also lowered the tank size applicability thresholds for Rule 1149 in its 2008 revision. The 2004 AFM analysis also addressed the tank size applicability threshold cost effectiveness for Rule 74.27. Based on cost estimates of $400 (fixed cost) plus $0.04 per gallon of tank size for degassing, the cost effectiveness of degassing a 5,000 gallon tank is approximately $9 per pound of ROC reduced. This is equivalent to the District's BACT cost effectiveness threshold and is by definition more stringent than RACT. Since the cost per pound of ROC removed will increase as tank size gets smaller, the current tank size threshold in Rule 74.27 is beyond RACT requirements. Due to the high cost of reducing the tank size and/or ROC concentration thresholds, Rule 74.27 meets RACT and no update is necessary at this time.

RULE 74.28: ASPHALT ROOFING OPERATIONS (Adopted 5/10/1994)

Rule 74.28 reduces ROC emissions from asphalt roofing equipment and operations by requiring close fitting container lids and temperature limits. Rule 74.28 applies to equipment used for melting, heating or holding asphalt or coal tar pitch. There is no CTG for this equipment and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.29: SOIL DECONTAMINATION OPERATIONS (Last Revised 4/8/2008)

This rule established procedures by which ROC emissions are minimized during the aeration, treatment or removal of soil contaminated with petroleum fuel. Rule 74.29 applies to soil

decontamination equipment and handling of contaminated soil. There is no CTG for this equipment or operations and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance for this rule are unnecessary.

RULE 74.30: WOOD PRODUCTS COATINGS (Last Revised 6/27/2006)

Rule 74.30 reduces ROC emissions from wood products coatings and cleaning materials by ROC content limits and by requiring certain application methods. Rule 74.30, SCAQMD Rule 1136 (amended 6/4/1996), and SJVAPCD Rule 4606 (amended 10/16/2008) are equivalent in stringency. Therefore, Rule 74.30 meets RACT and no changes are required at this time.

RULE 74.31: METALWORKING FLUIDS AND DIRECT CONTACT LUBRICANTS (Adopted 11/12/2013)

Rule 74.31 applies to the production, sale and use of metalworking fluids and direct contact lubricants and reduces ROC emissions by requiring substitution of high-ROC metalworking fluids with low-ROC fluids, including medium napthenic oils, paraffinic oils, vegetable oils, synthetic or semi-synthetic oils, or water-reducible fluids. There is no CTG for this equipment or operations and there are no major sources in Ventura County. Therefore, RACT analysis and RACT compliance are unnecessary at this time.