

Ozone State Implementation Plan (SIP) Revision
Reasonably Available Control Technology (RACT) as Applicable to the
8-Hour Ozone Standard
Sacramento Metropolitan Air Quality Management District

October 26, 2006

Background

This document constitutes a revision to the Ozone State Implementation Plan (SIP) for the Sacramento Air Quality Management District (SMAQMD). The U.S. Environmental Protection Agency (EPA) published the final Phase 2 Rule to implement the 8-hour ozone air quality standard on November 29, 2005 (70 FR 71611). Among the requirements of the Phase 2 Rule, a new section was added to the Code of Federal Regulations (40 CFR 51.912) that requires the SMAQMD to submit a revision to the SIP that meets the Reasonably Available Control Technology (RACT) requirements for VOC and NOx in accordance with Sections 182(b)(2) and 182(f) of the federal Clean Air Act for:

- Each category of VOC sources that is covered by a Control Technique Guideline (CTG) document issued by EPA; and
- All major stationary sources of VOC and/or NOx.

EPA's designations and classifications for the 8-hour ozone standard were published on April 30, 2004 (69 FR 23857) and became effective on June 15, 2004. The Sacramento Metropolitan Area was classified as a serious nonattainment area, with a deadline of 2013 to attain the standard. The major source emissions threshold for areas classified as serious is 50 tons per year of either VOC or NOx.

This SIP revision is based on an analysis performed by SMAQMD staff in accordance with EPA guidance. The analysis is presented in the *Staff Report for Analysis of Reasonably Available Control Technology for the 8-Hour Ozone State Implementation Plan (RACT SIP)*, SMAQMD, September 26, 2006.

Negative Declarations

The SMAQMD has reviewed its records for permitted sources, the enforcement program for unpermitted sources, and telephone yellow pages and has determined that there are no stationary sources or emitting facilities for the following CTG categories. In addition, the SMAQMD does not anticipate these sources in the future.

Source Category	CTG Document Title	Document Number
Automobile Coating	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
Dry Cleaning (Petroleum Solvent)	Control of Volatile Organic Compound Emissions from Large Petroleum Dry Cleaners	EPA-450/3-82-009
Graphic Arts (Rotogravure)	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts – Rotogravure and Flexography	EPA-450/2-78-033
Large Appliance Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances	EPA-450/2-77-034
Magnetic Wire Coating	Control of Volatile Organic Emissions from Existing	EPA-450/2-77-033

Source Category	CTG Document Title	Document Number
	Stationary Sources, Volume IV: Surface Coating for Insulation of Magnetic Wire	
Metal Coil Coating	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
Natural Gas/Gasoline Processing	Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants	EPA-450/2-83-007
Paper and Fabric Coating	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
Resin Manufacturing (High-Density Polyethylene, Polypropylene, and Polystyrene)	Control of Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins	EPA-450/3-83-008
Refineries	Control of Refinery Vacuum Producing Systems, Wastewater Separators and Process Unit Turnarounds	EPA-450/2-77-025
	Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment	EPA-450/2-78-036
Rubber Tire Manufacturing	Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires	EPA-450/2-78-030
Ship Coating	Control Techniques Guidelines for Shipbuilding and Ship Repair Operations (Surface Coating)	61 FR 44050
Wood Coating (Flat Wood Paneling)	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VII: Factory Surface Coating of Flat Wood Paneling	EPA-450/2-78-032

RACT Determination for CTG Categories

The SMAQMD has performed an analysis of District rules and has determined that the District has implemented RACT for all CTG categories for which there are existing sources. The CTG categories and the applicable District rules are shown in the following table.

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Source Category	CTG Document Title	CTG Document Number	SMAQMD Rule No. (Most Recent Amendment)	SIP Status
Aerospace Manufacturing	Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations	EPA-453/R-97-004	456 (7/23/98)	Adopted 9/5/96; Approved 11/9/98
Cutback Asphalt	Control of Volatile Organic Compounds from Use of Cutback Asphalt	EPA-450/2-77-037	453 (8/31/82)	Adopted 8/31/82; Approved 1/24/85
Gasoline Service Stations	Design Criteria for Stage I Vapor Control Systems, Gasoline Service Stations, November 1975	None	448 (2/2/95) 449 (9/26/02)	448: Adopted 2/2/95; Approved 1/23/96 449: Adopted 9/26/02; Approved 3/24/03
Gasoline Tank Trucks and Bulk Plants	1. Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals 2. Control of Volatile Organic Emissions from Gasoline Bulk Plants 3. Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems	EPA-450/2-77-026 EPA-450/2-77-035 EPA-450/2-78-051	447 (4/2/98) 448 (2/2/95)	447: Adopted 4/2/98; Approved 11/26/99 448: Adopted 2/2/95; Approved 1/23/96
Graphic Arts (Flexography)	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts – Rotogravure and Flexography	EPA-450/2-78-033	450 (3/23/00)	Adopted 12/5/96; Approved 11/13/98

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Source Category	CTG Document Title	CTG Document Number	SMAQMD Rule No. (Most Recent Amendment)	SIP Status
Metal Can Coating	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	452 (9/5/96)	Adopted 9/5/96; Approved 11/9/98
Metal Furniture Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture	EPA-450/2-77-032	451 (10/2/97)	Adopted 11/29/83; Approved 1/24/85 Adopted 9/5/96; No EPA Action
Metal Parts and Products Coating	Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products	EPA-450/2-78-015	451 (10/2/97)	Adopted 11/29/83; Approved 1/24/85 Adopted 9/5/96; No EPA Action
Petroleum Liquid Storage Tanks	1. Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed-Roof Tanks 2. Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks	EPA-450/2-77-036 EPA-450/2-78-047	446 (11/16/93)	Adopted 11/16/93; Approved 9/16/94
Pharmaceutical Products Manufacturing	Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products	EPA-450/2-78-029	455 (9/5/96)	Adopted 11/29/83; Approved 1/24/85 Adopted 9/5/96; No EPA Action

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Source Category	CTG Document Title	CTG Document Number	SMAQMD Rule No. (Most Recent Amendment)	SIP Status
Solvent Cleaning (Degreasers)	Control of Volatile Organic Emissions from Solvent Metal Cleaning	EPA-450/2-77-022	454 (5/23/02)	Adopted 4/3/97; Approved 4/2/99
Synthetic Organic Chemical Manufacturing	1. Control of Volatile Organic Compound Leaks from Synthetic Organic Chemical and Polymer Manufacturing Equipment	EPA-450/3-83-006	443 (9/5/96) 464 (7/23/98)	443: Adopted 9/5/96; Approved 11/9/98 464: Adopted 7/23/98; Approved 4/19/00
	2. Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry	EPA-450/3-84-015		
	3. Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry	EPA-450/4-91-031		
Wood Furniture Coating	Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations	EPA-453/R-96-007	463 (7/23/98)	Adopted 12/5/96; No EPA Action

RACT Determination for Major Sources of VOC or NOx

The SMAQMD has performed an analysis of major sources of VOC or NOx within the District and has determined that the requirements of RACT have been satisfied for all major sources. The list of major sources within the District is shown in the following table.

Major Source	Major Pollutant(s)
Aerojet	VOC, NOx
Campbell Soup	NOx
Carson Energy	NOx
Chevron	VOC
Kiefer Landfill	VOC, NOx
Procter and Gamble	VOC
Sacramento Cogeneration Authority	NOx
Santa Fe Pacific Pipeline	VOC
SMUD Cosumnes Power Plant	NOx
University of California, Davis Medical Center	NOx

One major source, the Kiefer Landfill, has a landfill gas flare for which the emissions of NOx are not limited by a District rule. The portions of Permit to Operate 17359 that limit the flare to NOx emissions of 0.06 lb/mmBtu, and the associated testing and recordkeeping requirements, are included in this SIP revision to satisfy the RACT requirements, as described in the following section.

Inclusion of Permit to Operate 17359 for the Kiefer Landfill Flare

Permit Description

The permit being submitted for inclusion in the SIP is the local District permit for the air pollution control landfill gas flare (currently P/O 17359). Permit conditions that have been left blank do not pertain to the NOx 0.06 lbs/mmBtu limit on the flare permit. A copy of the permit is attached to this document.

Additional Conditions to be Included in the Permit:

The following conditions will be added to the permit at its next update.

Specific Conditions to Be Added:

RACT DETERMINATION

28. This permit incorporates a Reasonably Available Control Technology (RACT) determination as required by Title I provisions of the Clean Air Act Amendments.
29. The expiration date shown on this permit is for state purposes. For Federal enforcement purposes the RACT provisions of this permit that are approved by U.S. Environmental Protection Agency (EPA) shall remain in effect as part of the

State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the EPA.

Specific Conditions to be Amended:

The following will be added to existing Condition 16 under the "At all times" column.

16.F. Records of sources test plans and results to determine compliance with the NO_x limit in Condition #6 shall be maintained for a minimum of 5 years.

The following will be added to Condition #27.

27.F. Compliance with the NO_x limit shall be determined using one of the following source test methods:

- 1) ARB Method 100;
- 2) EPA Method 7E; or
- 3) Any other method approved by the U.S. Environmental Protection Agency, the California Air Resources Board, and the Air Pollution Control Officer.

SACRAMENTO METROPOLITAN



PERMIT TO OPERATE

Kiefer Landfill
Department of Waste Management and Recycling
County of Sacramento
9850 Goethe Road
Sacramento, CA 95827

Equipment Location: 12701 Kiefer Boulevard and Grantline Road, Sacramento

PERMIT NO.	EQUIPMENT DESCRIPTION
17359	Air Pollution Control Landfill Gas Flare, , enclosed type,

SUBJECT TO THE FOLLOWING CONDITIONS:

GENERAL REQUIREMENTS

1. The equipment shall be properly maintained.

2.

3.

4.

Date Issued: 08-07-2006

Larry Greene
SMAQMD Air Pollution Control Officer

by: Bruce Nixon

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
PERMIT TO OPERATE

EMISSION LIMIT REQUIREMENTS

5.

6. Emissions from the Landfill Gas Flare shall not exceed the following:

Pollutant	Maximum Allowable Emissions
NOx	0.06 lb/MMBTU (high heating value)

7.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
PERMIT TO OPERATE

8. A.

B.

EQUIPMENT OPERATION REQUIREMENTS

9.

10. A sampling port, or other method approved by the SMAQMD Air Pollution Control Officer, shall be installed at the inlet gas line to the Landfill Gas Flare. The sampling port shall be located so that an accurate volume flow measurement can be performed.

11. Landfill Gas Flare exhaust sample ports shall be permanent, accessible and located and constructed as per applicable U.S. EPA, CARB and U.S. OSHA requirements.

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12.

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RECORDKEEPING AND REPORTING REQUIREMENTS

16.

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17.

18.

19.

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20. . The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks or on microfiche.

Frequency	Information to be recorded
At all times	C. All required maintenance performed on the air pollution control and monitoring equipment.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
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EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

21. -----

22.

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23.

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EMISSION TESTING REQUIREMENTS

27. An emission test shall be conducted each calendar year to demonstrate compliance with Condition Nos. 6,
- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the source test date.
 - C. Submit the source test report to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test.
 - D. The source test shall be conducted at the exhaust of the landfill gas flare (except for hydrogen sulfide test which shall use the inlet) and shall include a test for:
 - 1.
 - 2. Nitrogen oxides, NOx
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - E.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
PERMIT TO OPERATE

Your application for this air quality Permit to Operate was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (SMAQMD), state and federal air quality rules.

ATTACHMENT A

Kiefer Landfill
County of Sacramento