



JUN 25 2010

Steven Stadler  
Kings River Conservation District  
4886 E Jensen Ave  
Fresno, CA 93725

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # C-4305  
Project # C-1061912**

Dear Mr. Stadler:

Enclosed for your review and comment is the District's analysis of Kings River Conservation District's application for the Federally Mandated Operating Permit for its electrical power generation facility, 2611 E North Ave, Fresno, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

Attachments

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



JUN 25 2010

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # C-4305  
Project # C-1061912**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Kings River Conservation District's application for the Federally Mandated Operating Permit for its electrical power generation facility, 2611 E North Ave, Fresno, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

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JUN 25 2010

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # C-4305  
Project # C-1061912**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Kings River Conservation District's application for the Federally Mandated Operating Permit for its electrical power generation facility, 2611 E North Ave, Fresno, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

Attachments

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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Fresno Bee

**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED ISSUANCE OF  
FEDERALLY MANDATED OPERATING PERMITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to Kings River Conservation District for its electrical power generation facility, 2611 E North Ave, Fresno, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1061912, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

# **SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

## **Kings River Conservation District**

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# **TITLE V APPLICATION REVIEW**

Project #: C-1061912  
Deemed Complete: June 7, 2006

Engineer: Juscelino Siongco  
Date: June 2, 2010

Facility Number: C-4305  
Facility Name: Kings River Conservation District  
Mailing Address: 4886 E Jensen Ave  
Fresno, CA 93725

Contact Name: Steven Stadler  
Phone: (559) 237-5567

Responsible Official: Steven Stadler  
Title: Chief Engineer

## **I. PROPOSAL**

Kings River Conservation District is proposing that an initial Title V permit be issued for its existing electrical power generation facility in 2611 E North Ave, Fresno, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

## **II. FACILITY LOCATION**

Kings River Conservation District is located at 2611 E North Ave, in Fresno County, CA.

## **III. EQUIPMENT LISTING**

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

#### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant is requesting to use the following model general permit templates:

##### **A. SJV-UM-0-2, Facility-wide Umbrella General Permit Template**

The applicant has requested to utilize template #SJV-UM-02, Facility-wide Umbrella General Permit Template for unit C-4305-0-0. Based on the information submitted on the Template Qualification Form, the applicant qualifies for the use of this template.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit unit C-4305-0-0.

#### **VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES**

District Rule 1100, Equipment Breakdown (amended December 17, 1992) (Non-SIP replacement for Kern County Rule 111)

District Rule 1160, Emission Statements (adopted November 18, 1992)

District Rule 2010, Permits Required (amended December 17, 1992)

District Rule 2020, Exemptions (amended December 20, 2007)

District Rule 2031, Transfer of Permits (amended December 17, 1992)

District Rule 2040, Applications (amended December 17, 1992)

District Rule 2070, Standards for Granting Applications (amended December 17, 1992)

District Rule 2080, Conditional Approval (amended December 17, 1992)  
District Rule 2520, Sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1, 9.13.2, 9.16 and 10.0, Federally Mandated Operating Permits (amended June 21, 2001)  
District Rule 4101, Visible Emissions (amended February 17, 2005)  
District Rule 4601, Architectural Coatings (amended December 17, 2009)  
District Rule 8011, General Requirements (amended August 19, 2004)  
District Rule 8021, Construction, Demolition, Excavation and Other Earthmoving Activities (amended August 19, 2004)  
District Rule 8031, Bulk Materials (amended August 19, 2004)  
District Rule 8041, Carryout and Trackout (amended August 19, 2004)  
District Rule 8051, Open Areas (amended August 19, 2004)  
District Rule 8061, Paved and Unpaved Roads (amended August 19, 2004)  
District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (amended September 16, 2004)  
40 CFR Part 82, Subpart B and F, Stratospheric Ozone  
40 CFR Part 61, Subpart M, National Emission Standard for Asbestos

## **VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES**

District New and Modified Stationary Source Review Rule  
District Rule 1080, Stack Monitoring (amended December 17, 1992)  
District Rule 1081, Source Sampling (amended December 16, 1993)  
District Rule 2520, Federally Mandate Operating Permits (amended June 21, 2001)  
District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)  
District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)  
40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines  
40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines  
40 CFR Part 64 – Compliance Assurance Monitoring (CAM)  
40 CFR Part 72 – Acid Rain Program  
40 CFR Part 73 – Sulfur Dioxide Allowance System  
40 CFR Part 75 – Continuous Emission Monitoring



40 CFR Part 77 – Excess Emissions

## **VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE**

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as Federally Enforceable through Title V Permit.

This facility is subject to the following rules that are not currently federally enforceable:

District Rule 4102, Nuisance (amended December 17, 1992)

For this facility, condition 41 of the requirements for permit unit C-4305-0-0 is based on the rule listed above and are not Federally Enforceable through Title V.

## **IX. COMPLIANCE**

### **A. Requirements Addressed by Model General Permit Templates**

#### **1. Facility Wide Requirements**

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-2 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements as condition numbers 1 through 40 to assure compliance with these requirements.

The current version of template SJV-UM-0-2 does not address the requirements from the latest versions of District Rules 8011, 8021, 8031, 8041, 8051, 8061 (amended 8/19/04), and 8071 (amended 9/16/04). The latest versions of these rules are included in the State Implementation Plan (SIP). Conditions 29 through 34 on the facilitywide permit (C-4305-0-0) demonstrate compliance with the requirements of the latest versions of these rules. A comparison of the changes from the old versions of the rules to the latest versions of the rules is included in Attachment D.

The current version of template SJV-UM-0-2 does not address the requirements from the latest version of District Rule 4601 (amended 12/17/09). The latest version of District Rule 4601 (amended 12/17/09) has not been SIP approved. Attachment E contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to

show the current rule is as stringent if not more than the SIP approved version. Conditions 23 through 25 on the facilitywide permit (C-4305-0-0) demonstrate compliance with the requirements of the latest version of this rule.

## **B. Requirements Not Addressed by Model General Permit Templates**

### **1. New and Modified Stationary Source Review Rule (District NSR Rule)**

The permit units are subject to the District NSR Rule upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting Permit to Operate (PTO) were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Condition 1 from the current PTO has been included as condition 1 of the requirements for the proposed permit.
  - Condition 2 from the current PTO has been moved to the Facility-Wide permit as condition 41.
  - Condition 3 from the current PTO has been included as condition 22 of the requirements for the proposed permit.
  - Condition 4 from the current PTO has been moved to the Facility-Wide permit as condition 22.
  - Condition 5 from the current PTO has been included as condition 3 of the requirements for the proposed permit.
  - Condition 6 from the current PTO has been included as condition 4 of the requirements for the proposed permit. The requirement to measure and record the mass ratio of water-to-fuel had been removed from the condition since the unit is equipped with a continuous emissions monitor (CEMS) for NO<sub>x</sub>, CO, and O<sub>2</sub>.
  - Conditions 7 through 22 from the current PTO have been included as conditions 5 through 20 of the requirements for the proposed permit.
  - Condition 23 from the current PTO has been revised and included as condition 21 of the requirements for the proposed permit. Allowance for the use of a valid purchase contract, supplier certification, a tariff sheet or transportation contract to demonstrate the sulfur content of each fuel source was added.

- Conditions 24 through 32 from the current PTO have been included as conditions 22 through 30 of the requirements for the proposed permit.
  - Conditions 33 and 34 from the current PTO have been moved to the Facility-Wide permit as conditions 1 and 2.
  - Conditions 35 through 37 from the current PTO have been included as conditions 31 through 33 of the requirements for the proposed permit.
  - Conditions 38 and 39 from the current PTO had not been included with the requirements for the proposed permit. The conditions had been complied with and were obsolete.
  - Conditions 40 through 45 from the current PTO had been moved to the Facility-Wide permit as conditions 29 through 34.
  - Conditions 46 from the current PTO had not been included with the requirements for the proposed permit. The condition is only applicable to agricultural sources.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
- Condition 1 from the current PTO has been included as condition 1 of the requirements for the proposed permit.
  - Condition 2 from the current PTO has been moved to the Facility-Wide permit as condition 41.
  - Condition 3 from the current PTO has been included as condition 22 of the requirements for the proposed permit.
  - Condition 4 from the current PTO has been moved to the Facility-Wide permit as condition 22.
  - Condition 5 from the current PTO has been included as condition 3 of the requirements for the proposed permit.
  - Condition 6 from the current PTO has been included as condition 4 of the requirements for the proposed permit. The requirement to measure and record the mass ratio of water-to-fuel had been removed from the condition since the unit is equipped with a continuous emissions monitor (CEMS) for NO<sub>x</sub>, CO, and O<sub>2</sub>.
  - Conditions 7 through 22 from the current PTO have been included as conditions 5 through 20 of the requirements for the proposed permit.
  - Condition 23 from the current PTO has been revised and included as condition 21 of the requirements for the proposed permit. Allowance for the use of a valid purchase contract, supplier certification, a tariff sheet or transportation contract to demonstrate the sulfur content of each fuel source was added.

- Conditions 24 through 32 from the current PTO have been included as conditions 22 through 30 of the requirements for the proposed permit.
- Conditions 33 and 34 from the current PTO have been moved to the Facility-Wide permit as conditions 1 and 2.
- Conditions 35 through 37 from the current PTO have been included as conditions 31 through 33 of the requirements for the proposed permit.
- Conditions 38 and 39 from the current PTO had not been included with the requirements for the proposed permit. The conditions had been complied with and were obsolete.
- Conditions 40 through 45 from the current PTO had been moved to the Facility-Wide permit as conditions 29 through 34.
- Conditions 46 from the current PTO had not been included with the requirements for the proposed permit. The condition is only applicable to agricultural sources.

## **2. District Rule 1080, Stack Monitoring**

This rule grants the APCO the authority to request the installation, use maintenance, and inspection of continuous monitoring equipment. The general, source and pollutant specific requirements for continuous monitoring equipment are defined. This rule also specifies the performance standards for the equipment and administrative recordkeeping, reporting, and violation and equipment breakdown notification requirements.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 5, 6, 7, and 27 through 31 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 5, 6, 7, and 27 through 31 of the requirements for this permit unit assure compliance with this rule.

## **3. District Rule 1081, Source Sampling**

This rule ensures that any source operation which emits or may emit air contaminants provides adequate and safe facilities for use in sampling to

determine compliance. The rule also specifies methods and procedures for source testing, sample collection, and compliance determination.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 8, 20, 21, 22, and 23 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 8, 20, 21, 22, and 23 of the requirements for this permit unit assure compliance with this rule.

#### 4. District Rule 4201, Particulate Matter Concentration

The purpose of this rule is to protect the ambient air quality by establishing a particulate matter emission standard. Section 3.1 requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

$$PM \text{ Conc. (gr/scf)} = \frac{(PM \text{ emission rate}) \times (7000 \text{ gr/lb})}{(Air \text{ flow rate}) \times (60 \text{ min/hr})}$$

PM<sub>10</sub> emission rate = 3.40 lb/hr (permit condition #12)

Assuming 100% of PM is PM<sub>10</sub>

H<sub>2</sub>O = 10.09%

Exhaust Gas Flow, acfm (wet) = 508,454<sup>1</sup>

Exhaust Gas Flow, dscfm = 508,454 \* [(100 – 10.09)/100] = 457,151

PM Conc. (gr/scf) = [(3.40 lb/hr) \* (7,000 gr/lb)] ÷ [(457,151 ft<sup>3</sup>/min) \* (60 min/hr)]

PM Conc. = 0.0009 gr/scf

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 1, 12, and 20 of the requirements for this permit unit assure compliance with this rule.

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<sup>1</sup> Worst-case exhaust gas flow occurs under Case #9: Ambient temperatures of 103°F and CTG air inlet chillers off.

- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
- Conditions 1, 12, and 20 of the requirements for this permit unit assure compliance with this rule.

### 5. District Rule 4703, Stationary Gas Turbines

Rule 4703 is applicable to stationary gas turbines with a rating greater than 0.3 megawatts. The facility proposes to install two 49.7 MW gas turbines, therefore this rule applies.

Section 5.1.1 of this rule limits the NO<sub>x</sub> emissions (excluding periods of thermal stabilization) from gas-fired stationary gas turbine systems greater than 10 MW, and equipped with Selective Catalytic Reduction (SCR), based on the following equation:

$$\text{NO}_x \text{ (ppmv @ 15\% O}_2\text{)} = 9 \times \left( \frac{\text{EFF}}{25} \right)$$

Where EFF is the higher of EFF<sub>1</sub> or EFF<sub>2</sub> where:

$$\text{EFF}_1 = \frac{3,412 \frac{\text{Btu}}{\text{kW-hr}}}{\text{Actual Heat Rate @ HHV} \left( \frac{\text{Btu}}{\text{kW-hr}} \right)} \times 100, \text{ and } \text{EFF}_2 = \text{EFF}_{\text{MFR}} \frac{\text{LHV}}{\text{HHV}}$$

$$\text{EFF}_2 = \text{EFF}_{\text{mfr}} * (\text{LHV/HHV})$$

Calculated data indicates that the Actual Heat Rate @ HHV is 9,382 Btu/KW-hr. Therefore:

$$\text{EFF}_1 = \frac{3,412 \frac{\text{Btu}}{\text{kW-hr}}}{9,382 \frac{\text{Btu}}{\text{kW-hr}}} \times 100 = 36.37\%$$

$$\text{NO}_x \text{ limit utilizing } \text{EFF}_1 = 9 \times \left( \frac{36.37}{25} \right) = 13.1 \text{ ppmvd @ 15\% O}_2$$

EFF<sub>2</sub> calculations are not necessary since Rule 4703 emission limits will be no lower than 9 ppmv NO<sub>x</sub> and the turbines will be limited to a maximum of 2.5 ppmv NO<sub>x</sub>@15% O<sub>2</sub> (based on a 3-hour average), therefore compliance is expected.

Section 5.1.2 (Tier 2) of this rule limits the NO<sub>x</sub> emissions (excluding periods of thermal stabilization) from stationary gas turbine systems greater than 10 MW to 5 ppmv@15%O<sub>2</sub> (Standard option) and 3 ppmv@15%O<sub>2</sub> (Enhanced Option). The turbines will be limited to 2.5 ppmv@15%O<sub>2</sub> (based on a 3-hour average), therefore compliance with this section is expected.

Section 5.2 limits the CO emissions from stationary gas turbine systems subject to Section 5.1.1 to 200 ppmv CO@15% O<sub>2</sub>. The turbines will be limited to a maximum of 6 ppmv CO @15%O<sub>2</sub>, therefore compliance is expected.

Monitoring and recordkeeping:

Sections 6.2 and 6.3 contain the following monitoring, recordkeeping and source testing requirements.

6.2.1 Except for units subject to Section 6.2.3, for turbines without exhaust-gas NO<sub>x</sub> control devices; install, operate, and maintain continuous emissions monitoring equipment for NO<sub>x</sub> and oxygen or install and maintain an APCO-approved alternate monitoring scheme.

6.2.2 Except for units subject to Section 6.2.3, for turbines without exhaust-gas NO<sub>x</sub> control devices and without continuous emissions monitoring equipment; monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier, and approved by the APCO.

6.2.4 Maintain records for inspection at any time for a period of five years.

6.2.5 Correlate control system operating parameters with NO<sub>x</sub> emissions. This requirement applies to the selective catalytic reduction system. This information may be used by the APCO to determine compliance when the continuous emissions monitoring system not operating properly.

6.2.6 Maintain an operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used (liquid/gas).

6.3.1 Provide source test information annually regarding the exhaust gas NO<sub>x</sub> and CO concentrations, and, if used as a basis for Tier 1 emission limit calculations, the demonstrated percent efficiency (EFF) of the stationary gas turbines.

The facility must demonstrate compliance annually with the NO<sub>x</sub> and CO emission limits using the following test methods:

Oxides of nitrogen emissions for compliance tests shall be determined by using EPA Method 7E or EPA Method 20. Carbon monoxide emissions for compliance tests shall be determined by using EPA Test Methods 10 or 10B. Oxygen content of the exhaust gas shall be determined by using EPA Methods 3, 3A, or 20. HHV and LHV of gaseous fuels shall be determined by using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 4, 5, 11, 12, 20, 23, 24, 25, and 26 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 4, 5, 11, 12, 20, 23, 24, 25, and 26 of the requirements for this permit unit assure compliance with this rule.

## 6. 40 CFR 60 – Subpart GG

40 CFR Part 60 Subpart GG applies to all stationary gas turbines with a heat input greater than 10.7 gigajoules per hour (10.2 MMBtu/hr), that commence construction, modification, or reconstruction after 10/03/77.

§60.332: Standards for nitrogen oxides

60.332(a) states, NO<sub>x</sub> emissions from the turbine with a minimum heat input rating of 250 MMBtu/hr are limited by the following equation:

$$\text{NO}_x (\% \text{ by vol @ } 15\% \text{ O}_2) \text{ 1 hr avg} = 0.0075(14.4/Y) + F$$

where:

$$\begin{aligned} Y &= \text{manufacturers rated heat load (kJ/W-hr)} \\ &= (9,382 \text{ Btu/kW-hr})(\text{kW}/1,000 \text{ W})(1,054.2 \text{ J/Btu})(\text{kJ}/1,000 \text{ J})^{(2)} \\ &= 9.89 \text{ kJ/W-hr (less than } 14.4 \text{ kJ/W hour)} \end{aligned}$$

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<sup>2</sup> The rated heat load for the GE Model LM600 PC Sprint turbine is 9,382 Btu/kW-hr, based on 49.7 MW nominal rating and a 466.3 MMBtu/hr heat input rating (HHV, full load, and 25 °F).



F = 0 (fuel bound nitrogen for natural gas fuel)

$$\begin{aligned} \text{NO}_x \text{ (\% by vol @ 15\% O}_2\text{)} &= 0.0075(14.4/9.89) + 0 \\ &= 0.0109 \text{ \%} \\ &= 109 \text{ ppmv @ 15\% O}_2 \end{aligned}$$

The permit units are limited to a NO<sub>x</sub> concentration limit of 2.5 ppmv@15% O<sub>2</sub> (3-hr average). Therefore, compliance with the NSPS NO<sub>x</sub> standard is expected.

§60.333: Standards for sulfur dioxide

60.333(a) and (b) define the applicable SO<sub>x</sub> limits as follows:

$$\begin{aligned} \text{SO}_x &= 0.015\% \text{ by vol @ 15\% O}_2 \\ &= 150 \text{ ppmv @ 15\% O}_2 \end{aligned}$$

or fuel S ≤ 0.8% by weight.

The 150 ppmv @ 15% O<sub>2</sub> limit specified in section 60.333, paragraph (a) is equivalent to 0.769 lb-SO<sub>x</sub>/MMBtu as follows:

$$\frac{(150 \text{ ppmvd}) \times \left(8,578 \frac{\text{ft}^3}{\text{MMBtu}}\right) \times \left(64 \frac{\text{lb-SO}_x}{\text{lb-mol}}\right) \times \left(\frac{20.9}{20.9-15}\right)}{\left(379.5 \frac{\text{ft}^3}{\text{lb-mol}}\right) \times (10^6)} = 0.769 \frac{\text{lb-SO}_x}{\text{MMBtu}}$$

SO<sub>x</sub> emissions are based on combusting natural gas with a fuel sulfur content of 0.40 gr/100 scf, which results in an emission rate of 0.00114 lb-SO<sub>x</sub>/MMBtu. The percent sulfur by weight of natural gas of 0.40 gr-S/100 scf natural gas is 0.00135%, determined as follows (assuming a 100 scf sample comprised of methane at 60 °F):

$$\left(\frac{0.40 \text{ gr-S}}{100 \text{ ft}^3 \text{ - NG}}\right) \times \left(\frac{\text{lb-S}}{7000 \text{ gr-S}}\right) \times \left(\frac{\text{ft}^3 \text{ - NG}}{0.0424 \text{ lb-NG}}\right) = 1.35 \times 10^{-5} \frac{\text{lb-S}}{\text{lb-NG}}$$

Both SO<sub>x</sub> emissions and fuel sulfur content are less than that required by Subpart GG. Recordkeeping and reporting of the fuel sulfur content is required as specified in section 60.334 (h).

Reporting and notifications will be required as specified in 40 CFR, Subpart A. Compliance is expected.

**§60.334: Monitoring of Operations**

60.334(a) Except as provided in paragraph (b) of this section, the owner or operator of any stationary gas turbine subject to the provisions of this subpart and using water or steam injection to control NO<sub>x</sub> emissions shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel being fired in the turbine.

60.334(b) The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NO<sub>x</sub> emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO<sub>x</sub> and O<sub>2</sub> monitors.

60.334(h)(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084–82, 94, D5504–01, D6228–98, or Gas Processors Association Standard 2377–86 (all of which are incorporated by reference-see §60.17), which measure the major sulfur compounds may be used; and

60.334(h)(2) Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen ( *i.e.*, if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in §60.332). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.

60.334(h)(3) Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration: (i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.

§60.335: Test methods and procedures

60.335(a) The owner or operator shall conduct the performance tests required in §60.8, using either (1) EPA Method 20, (2) ASTM D6522-00 (incorporated by reference, see §60.17), or (3) EPA Method 7E and either EPA Method 3 or 3A in appendix A to this part, to determine NO<sub>x</sub> and diluent concentration.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 4, 5, 9, 12, 21, 23, 32, and 33 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 4, 5, 9, 12, 21, 23, 32, and 33 of the requirements for this permit unit assure compliance with this rule.

**7. 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines**

This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

These permit units are not subject to this subpart since the permit units had not undergone construction, modification or reconstruction after the February 18, 2005.

**8. 40 CFR Part 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines**

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

The facility is not a major or area source of HAP emissions and is not subject to this subpart.

## 9. 40 CFR Part 64, CAM

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

Each permit unit has emissions limits for all five criteria pollutants (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC). There are no add-on controls for SO<sub>x</sub> and PM<sub>10</sub>, therefore CAM is not applicable for SO<sub>x</sub> and PM<sub>10</sub>.

Based on 40 CFR 64.2(b)(1)(vi), NO<sub>x</sub> and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NO<sub>x</sub> and CO. Each permit unit may be subject to CAM for VOC since there is a VOC limit and it has add-on control in the form of an oxidation catalytic system. However, the pre-control VOC potential to emit is less than the major source threshold of 50,000 lb-VOC/year as shown below.

The natural gas uncontrolled emission factor is 5.5 lb-VOC/MMscf or 0.006 lb-VOC/MMBtu (Ap-42, 1.4-2, July 1998). Each unit's rating is approximately 466.3 MMBtu/hr (HHV).

$$466.3 \text{ MMBtu/hr} \times 0.006 \text{ lb-VOC/MMBtu} \times 8,760 \text{ hr/yr} = 24,509 \text{ lb-VOC/yr}$$

Therefore, permit units C-4305-1-1 and C-4305-2-1 are not subject to CAM.

## 10. 40 CFR Part 72, Acid Rain Program

The purpose of this part is to establish certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)

- Conditions 34, 39, 40, 42, 43, 44, and 47 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
- Conditions 34, 39, 40, 42, 43, 44, and 47 of the requirements for this permit unit assure compliance with this rule.

#### **11. 40 CFR Part 73, Sulfur Dioxide Allowance System**

The purpose of this part is to establish the requirements and procedures for the following:

- (a) The allocation of sulfur dioxide emissions allowances;
- (b) The tracking, holding, and transfer of allowances;
- (c) The deduction of allowances for purposes of compliance and for purposes of offsetting excess emissions pursuant to parts 72 and 77;
- (d) The sale of allowances through EPA-sponsored auctions and a direct sale, including the independent power producers written guarantee program; and
- (e) The application for, and distribution of, allowances from the Conservation and Renewable Energy Reserve.
- (f) The application for, and distribution of, allowances for desulfurization of fuel by small diesel refineries.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
- Conditions 37 and 41 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
- Conditions 37 and 41 of the requirements for this permit unit assure compliance with this rule.

#### **12. 40 CFR Part 75, Continuous Emission Monitoring**

The purpose of this part is to establish requirements for the monitoring, recordkeeping, and reporting of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides

(NO<sub>x</sub>), and carbon dioxide (CO<sub>2</sub>) emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 35, 36, 39, 48, and 49 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 35, 36, 39, 48, and 49 of the requirements for this permit unit assure compliance with this rule.

### **13. 40 CFR Part 77, Excess Emissions**

This part sets forth the excess emissions offset planning and offset penalty requirements under section 411 of the Clean Air Act. These requirements shall apply to the owners and operators and, to the extent applicable, the designated representative of each affected unit and affected source under the Acid Rain Program.

- a. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #1 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-1-1)
  - Conditions 38, 45, and 46 of the requirements for this permit unit assure compliance with this rule.
- b. 49.7 MW Nominally Rated Simple-Cycle Peak-Demand Power Generating System #2 Consisting of a General Electric LM6000 PC Sprint Natural Gas-Fired Combustion Turbine Generator (C-4305-2-1)
  - Conditions 38, 45, and 46 of the requirements for this permit unit assure compliance with this rule.

## **X. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit

is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

**A. Requirements Addressed by Model General Permit Templates**

By using the model general permit template listed in Section IV of this evaluation, the applicant has requested that a permit shield be issued for requirements addressed in the template. The basis for each permit shield is discussed in the Permit Shield section of each template.

**XI. PERMIT CONDITIONS**

See draft operating permit beginning on the following page.

# San Joaquin Valley Air Pollution Control District

FACILITY: C-4305-0-0

EXPIRATION DATE: 06/30/2010

## FACILITY-WIDE REQUIREMENTS

1. {2285} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {2286} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {2287} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. {2290} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {2291} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {2292} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. {2293} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: KINGS RIVER CONSERVATION DISTRICT  
Location: 2611 E NORTH AVE, FRESNO, CA

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10. {2294} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {2295} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {2296} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {2297} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {2298} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {2299} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {2300} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {2301} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {2302} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {2303} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {2304} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {2310} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {2311} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {2312} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment traffic area that anticipates more than 50 or more Average Annual Daily Trips(AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment traffic area that anticipates 150 vehicle daily trips (VDT), or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

35. {2319} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {2320} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {2321} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {2322} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {2323} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. On {MONTH DAY, YEAR}, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-4305-1-1

EXPIRATION DATE: 06/30/2010

## EQUIPMENT DESCRIPTION:

49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for a period or periods not exceeding three minutes in any one hour. [District NSR Rule and 4101] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District NSR Rule, 40 CFR 60.334(b), and 4703] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The CEMs shall meet the requirements of 40 CFR part 60, Appendices B and F (for CO), and 40 CFR part 75, Appendices A and B (for NO<sub>x</sub> and O<sub>2</sub>) and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District NSR Rule, 1080, 40 CFR 60.334(b), and 4703] Federally Enforceable Through Title V Permit
6. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
7. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The CTG shall be fired exclusively on natural gas with a sulfur content of no greater than 0.40 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District NSR Rule and 40 CFR 60.333] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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10. During periods of thermal stabilization, CTG exhaust emissions shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 20.0 lb/hr, CO - 6.20 lb/hr, or VOC - 1.60 lb/hr, based on three hour averages. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
11. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Startup/shutdown emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
12. Emission rates from this unit, except during thermal stabilization periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 4.25 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; SO<sub>x</sub> (as SO<sub>2</sub>) - 0.53 lb/hr; PM<sub>10</sub> - 3.40 lb/hr; CO - 6.20 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 1.60 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>. All emission concentration limits are based on three hour rolling averages. [District NSR Rule, 40 CFR 60.332, and 4703] Federally Enforceable Through Title V Permit
13. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 6.54 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
14. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average will commence on the hour. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emissions from this unit, on days when a startup and/or shutdown occurs, shall not exceed the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 133.5 lb/day; SO<sub>x</sub> (as SO<sub>2</sub>) - 12.7 lb/day; PM<sub>10</sub> - 81.6 lb/day; CO - 148.8 lb/day; or VOC - 38.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 19,009 lb/year; SO<sub>x</sub> (as SO<sub>2</sub>) - 1,656 lb/year; PM<sub>10</sub> - 10,618 lb/year; CO - 19,363 lb/year; or VOC - 4,997 lb/year. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
19. Source testing to measure startup NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted at least once every seven years. CEM relative accuracy audit (RAA) shall be determined during startup source testing in accordance with 40 CFR 60, Appendix F. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing to measure the NO<sub>x</sub>, CO, VOC, and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be at least once every twelve months. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
21. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly except after demonstrating compliance with the fuel sulfur content limit for 8 consecutive weeks for a fuel source, then the testing frequency shall not be less than quarterly. If a test shows noncompliance with the sulfur content requirement, the facility must return to weekly testing until eight consecutive weeks show compliance. [District 1081, 2540, 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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22. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20, PM<sub>10</sub> - EPA Method 5 (front half and back half), CO - EPA Method 10 or 10B, O<sub>2</sub> - EPA Method 3, 3A, or 20, VOC - EPA Method 18 or 25, ammonia - BAAQMD ST-1B, and fuel gas sulfur content - ASTM D3246. NO<sub>x</sub> test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 40 CFR 60.335, and 4703] Federally Enforceable Through Title V Permit
24. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
25. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NO<sub>x</sub> mass emission rates (lb/hr and lb/twelve month rolling period). [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
26. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
27. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
29. For the CO CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
30. For the NO<sub>x</sub> and O<sub>2</sub> CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 75, Appendix A, at least once every two operating quarters, unless incentive criteria has been met which allows the RATA to be performed once every fourth operating quarter. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 75, Appendix A. [District Rule 1080] Federally Enforceable Through Title V Permit
31. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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32. Operator shall submit a semiannual report to the APCO listing any period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [40 CFR 60.334] Federally Enforceable Through Title V Permit
33. Permittee shall provide notification and recordkeeping as required under 40 CFR, Part 60, Subpart A, 60.7. [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
34. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
35. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
36. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
37. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
38. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
39. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
40. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
41. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
42. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
43. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
44. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
45. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
46. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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47. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
48. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
49. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-4305-2-1

EXPIRATION DATE: 06/30/2010

## EQUIPMENT DESCRIPTION:

49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for a period or periods not exceeding three minutes in any one hour. [District NSR Rule and 4101] Federally Enforceable Through Title V Permit
4. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District NSR Rule, 40 CFR 60.334(b), and 4703] Federally Enforceable Through Title V Permit
5. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The CEMs shall meet the requirements of 40 CFR part 60, Appendices B and F (for CO), and 40 CFR part 75, Appendices A and B (for NO<sub>x</sub> and O<sub>2</sub>) and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District NSR Rule, 1080, 40 CFR 60.334(b), and 4703] Federally Enforceable Through Title V Permit
6. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
7. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
8. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The CTG shall be fired exclusively on natural gas with a sulfur content of no greater than 0.40 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District NSR Rule and 40 CFR 60.333] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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10. During periods of thermal stabilization, CTG exhaust emissions shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 20.0 lb/hr, CO - 6.20 lb/hr, or VOC - 1.60 lb/hr, based on three hour averages. [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
11. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Startup/shutdown emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
12. Emission rates from this unit, except during thermal stabilization periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 4.25 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; SO<sub>x</sub> (as SO<sub>2</sub>) - 0.53 lb/hr; PM<sub>10</sub> - 3.40 lb/hr; CO - 6.20 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 1.60 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>. All emission concentration limits are based on three hour rolling averages. [District NSR Rule, 40 CFR 60.332, and 4703] Federally Enforceable Through Title V Permit
13. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 6.54 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [District NSR Rule and 4102] Federally Enforceable Through Title V Permit
14. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average will commence on the hour. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Emissions from this unit, on days when a startup and/or shutdown occurs, shall not exceed the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 133.5 lb/day; SO<sub>x</sub> (as SO<sub>2</sub>) - 12.7 lb/day; PM<sub>10</sub> - 81.6 lb/day; CO - 148.8 lb/day; or VOC - 38.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 19,009 lb/year; SO<sub>x</sub> (as SO<sub>2</sub>) - 1,656 lb/year; PM<sub>10</sub> - 10,618 lb/year; CO - 19,363 lb/year; or VOC - 4,997 lb/year. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
19. Source testing to measure startup NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted at least once every seven years. CEM relative accuracy audit (RAA) shall be determined during startup source testing in accordance with 40 CFR 60, Appendix F. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing to measure the NO<sub>x</sub>, CO, VOC, and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every twelve months. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
21. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly except after demonstrating compliance with the fuel sulfur content limit for 8 consecutive weeks for a fuel source, then the testing frequency shall not be less than quarterly. If a test shows noncompliance with the sulfur content requirement, the facility must return to weekly testing until eight consecutive weeks show compliance. [District 1081, 2540, 40 CFR 60.334(h)(3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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22. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20, PM<sub>10</sub> - EPA Method 5 (front half and back half), CO - EPA Method 10 or 10B, O<sub>2</sub> - EPA Method 3, 3A, or 20, VOC - EPA Method 18 or 25, ammonia - BAAQMD ST-1B, and fuel gas sulfur content - ASTM D3246. NO<sub>x</sub> test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 40 CFR 60,335, and 4703] Federally Enforceable Through Title V Permit
24. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
25. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period); continuous emission monitor measurements, calculated ammonia slip, and calculated NO<sub>x</sub> mass emission rates (lb/hr and lb/twelve month rolling period). [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
26. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule and 4703] Federally Enforceable Through Title V Permit
27. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
28. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
29. For the CO CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
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31. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit

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32. Operator shall submit a semiannual report to the APCO listing any period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [40 CFR 60.334] Federally Enforceable Through Title V Permit
33. Permittee shall provide notification and recordkeeping as required under 40 CFR, Part 60, Subpart A, 60.7. [40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
34. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
35. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
36. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
37. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
38. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
39. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
40. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
41. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
42. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
43. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
44. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
45. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
46. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

47. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
48. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
49. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# Attachment A

## Detailed Facility Printout

**Detailed Facility Report**  
For Facility=4305 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

<b>KINGS RIVER CONSERVATION DISTRICT</b> <b>2611 E NORTH AVE</b> <b>FRESNO, CA</b>	<b>FAC #</b> <b>STATUS:</b> <b>TELEPHONE:</b>	<b>C 4305</b> <b>A</b>	<b>TYPE:</b> <b>TOXIC ID:</b>	<b>TitleV</b>	<b>EXPIRE ON:</b> <b>AREA:</b> <b>INSP. DATE:</b>	<b>06/30/2010</b> <b>8 /</b> <b>08/10</b>
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<b>PERMIT NUMBER</b>	<b>FEE DESCRIPTION</b>	<b>FEE RULE</b>	<b>QTY</b>	<b>FEE AMOUNT</b>	<b>FEE TOTAL</b>	<b>PERMIT STATUS</b>	<b>EQUIPMENT DESCRIPTION</b>
C-4305-1-0	49,700 kW	3020-08B G	1	10,215.00	10,215.00	A	49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST
C-4305-2-0	49,700 kW	3020-08B G	1	10,215.00	10,215.00	A	49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST

Number of Facilities Reported: 1

# Attachment B

## Exempt Equipment



**San Joaquin Valley  
Unified Air Pollution Control District  
Title V Application - INSIGNIFICANT ACTIVITIES**

COMPANY NAME: <b>Kings River Conservation District</b>	FACILITY ID: <b>C-4305</b>
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Check the box next to the exemption category from Rule 2020 which describes any insignificant activity or equipment at your facility not requiring a permit.

Exemption Category	Rule 2020 Citation	√	Exemption Category	Rule 2020 Citation	√
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1		Containers used to store refined lubricating oils	6.6.8	√
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4		Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	√
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1		Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	
Piston-type i.c. engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2		Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3		Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥ 0.8251	6.7.1.1	
Space heating equipment other than boilers	6.1.4	√	Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	6.2	√	Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	√
Use of less than 2 gal/day of graphic arts materials	6.3		Equipment used to apply architectural coatings	6.8.1	√
Equipment at retail establishments used to prepare food for human consumption	6.4.1		Unheated, non-conveyorized cleaning equipment with < 10 ft <sup>2</sup> open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	√
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3		Brazing, soldering, or welding equipment	6.10	√
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5		Equipment used to compress natural gas	6.11	√
Containers used to store clean produced water	6.6.1		Fugitive emissions sources assoc. with exempt equipment	6.12	√
Containers ≤ 100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2		Pits and Ponds as defined in Rule 1020	6.15	
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3		On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature < 150 F	6.6.4	√	Emissions less than 2 lb/day from units not included above	6.19	√
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5	√	Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	√
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥ 0.9042	6.6.6		Non-structural repairs & maintenance to permitted equipment	7.3	√
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7		Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

No insignificant activities (Check this box if no equipment in the above categories exist at your facility.)

**Attachment C**

**SJVUAPCD Permits**



# Permit to Operate

**FACILITY:** C-4305

**EXPIRATION DATE:** 06/30/2010

**LEGAL OWNER OR OPERATOR:**  
**MAILING ADDRESS:**

KINGS RIVER CONSERVATION DISTRICT  
4886 E JENSEN AVE  
FRESNO, CA 93725-1899

**FACILITY LOCATION:**

2611 E NORTH AVE  
FRESNO, CA

**FACILITY DESCRIPTION:**

ELECTRICAL GENERATION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

**Seyed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-4305-1-0

**EXPIRATION DATE:** 06/30/2010

**EQUIPMENT DESCRIPTION:**

49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for a period or periods not exceeding three minutes in any one hour. [District Rules 2201 and 4101]
6. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201, 4001, and 4703]
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The CEMs shall meet the requirements of 40 CFR part 60, Appendices B and F (for CO), and 40 CFR part 75, Appendices A and B (for NO<sub>x</sub> and O<sub>2</sub>) and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201, 4001, and 4703]
8. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
9. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
11. The CTG shall be fired exclusively on natural gas with a sulfur content of no greater than 0.40 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]
12. During periods of thermal stabilization, CTG exhaust emissions shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 20.0 lb/hr, CO - 6.20 lb/hr, or VOC - 1.60 lb/hr, based on three hour averages. [District Rules 2201 and 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Startup/shutdown emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703]
14. Emission rates from this unit, except during thermal stabilization periods, shall not exceed any of the following limits: NOx (as NO<sub>2</sub>) - 4.25 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; SOx (as SO<sub>2</sub>) - 0.53 lb/hr; PM<sub>10</sub> - 3.40 lb/hr; CO - 6.20 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 1.60 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>. All emission concentration limits are based on three hour rolling averages. [District Rules 2201, 4001, and 4703]
15. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 6.54 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [District Rules 2201 and 4102]
16. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average will commence on the hour. [District Rule 2201]
17. Emissions from this unit, on days when a startup and/or shutdown occurs, shall not exceed the following: NOx (as NO<sub>2</sub>) - 133.5 lb/day; SOx (as SO<sub>2</sub>) - 12.7 lb/day; PM<sub>10</sub> - 81.6 lb/day; CO - 148.8 lb/day; or VOC - 38.4 lb/day. [District Rule 2201]
18. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: NOx (as NO<sub>2</sub>) - 19,009 lb/year; SOx (as SO<sub>2</sub>) - 1,656 lb/year; PM<sub>10</sub> - 10,618 lb/year; CO - 19,363 lb/year; or VOC - 4,997 lb/year. [District Rule 2201]
19. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
20. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation: (ppmvd @ 15% O<sub>2</sub>) = ((a - (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
21. Source testing to measure startup NOx, CO, and VOC mass emission rates shall be conducted at least once every seven years. CEM relative accuracy audit (RAA) shall be determined during startup source testing in accordance with 40 CFR 60, Appendix F. [District Rule 1081]
22. Source testing to measure the NOx, CO, VOC, and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be at least once every twelve months. [District Rules 1081 and 4703]
23. Compliance with natural gas sulfur content limit shall be demonstrated weekly, except after demonstrating compliance with the fuel sulfur content limit for 8 consecutive weeks for a fuel source, then the testing frequency shall not be less than quarterly. If a test shows noncompliance with the sulfur content requirement, the facility must return to weekly testing until eight consecutive weeks show compliance. [District Rules 1081, 2540, and 4001]
24. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
25. The following test methods shall be used: NOx - EPA Method 7E or 20, PM<sub>10</sub> - EPA Method 5 (front half and back half), CO - EPA Method 10 or 10B, O<sub>2</sub> - EPA Method 3, 3A, or 20, VOC - EPA Method 18 or 25, ammonia - BAAQMD ST-1B, and fuel gas sulfur content - ASTM D3246. NOx test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001, and 4703]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703]
27. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rules 2201 and 4703]
28. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703]
29. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
30. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
31. For the CO CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
32. For the NOx and O2 CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 75, Appendix A, at least once every two operating quarters, unless incentive criteria has been met which allows the RATA to be performed once every fourth operating quarter. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 75, Appendix A. [District Rule 1080]
33. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
34. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
35. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080]
36. Operator shall submit a semiannual report to the APCO listing any period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [District Rule 4001]
37. Permittee shall provide notification and recordkeeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
38. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
39. Permittee shall submit an application to comply with Rule 2540 - Acid Rain Program. [District Rule 2540]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

40. Disturbances of soil related to any construction, demolition, excavation, extraction, and other earthmoving activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8021 (11/15/01) unless specifically exempted under section 4.0 of Rule 8021. [District Rule 8021]
41. Outdoor handling, storage, and transport of any bulk material shall comply with the requirements of SJVUAPCD District Rule 8031 (11/15/01), unless specifically exempted under section 4.0 of Rule 8031. [District Rule 8031]
42. All sites that are subject to SJVUAPCD District Rule 8021, SJVUAPCD District Rule 8031, and SJVUAPCD District Rule 8071 shall comply with the requirements of SJVUAPCD District Rule 8041 (11/15/01), unless specifically exempted under section 4.0 of Rule 8041. [District Rule 8041]
43. Any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused or vacant for more than seven days shall comply with the requirements of SJVUAPCD District Rule 8051 (11/15/01), unless specifically exempted under section 4.0 of Rule 8051. [District Rule 8051]
44. Any new or existing public or private paved or unpaved road, road construction project, or road modification project shall implement the control measures and design criteria of, and comply with the requirements of SJVUAPCD District Rule 8061 (11/15/01) unless specifically exempted under section 4.0 of Rule 8061. [District Rule 8061]
45. Any unpaved vehicle/equipment traffic area of 1.0 acre or larger shall comply with the requirements of SJVUAPCD District Rule 8071 (11/15/01), unless specifically exempted under section 4.0 of Rule 8071. [District Rule 8071]
46. Any off-field agricultural sources shall comply with the requirements of SJVUAPCD District Rule 8081 (11/15/01), unless specifically exempted under section 4.0 of Rule 8081. [District Rule 8081]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-4305-2-0

**EXPIRATION DATE:** 06/30/2010

**EQUIPMENT DESCRIPTION:**

49.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 PC SPRINT NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
5. Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater, except for a period or periods not exceeding three minutes in any one hour. [District Rules 2201 and 4101]
6. The turbine shall be equipped with a continuous monitoring system to measure and record hours of operation, mass ratio of water-to-fuel injected and fuel consumption. [District Rules 2201, 4001, and 4703]
7. The exhaust stack shall be equipped with a continuous emissions monitor (CEM) for NO<sub>x</sub>, CO, and O<sub>2</sub>. The CEMs shall meet the requirements of 40 CFR part 60, Appendices B and F (for CO), and 40 CFR part 75, Appendices A and B (for NO<sub>x</sub> and O<sub>2</sub>) and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 1080, 2201, 4001, and 4703]
8. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080]
9. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080]
10. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NO<sub>x</sub>, CO, and O<sub>2</sub> analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081]
11. The CTG shall be fired exclusively on natural gas with a sulfur content of no greater than 0.40 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201]
12. During periods of thermal stabilization, CTG exhaust emissions shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 20.0 lb/hr, CO - 6.20 lb/hr, or VOC - 1.60 lb/hr, based on three hour averages. [District Rules 2201 and 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.



13. Thermal Stabilization is defined as the startup or shutdown time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours per occurrence. Startup/shutdown emissions shall be counted toward all applicable emission limits (lb/day and lb/year). [District Rules 2201 and 4703]
14. Emission rates from this unit, except during thermal stabilization periods, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) - 4.25 lb/hr and 2.5 ppmvd @ 15% O<sub>2</sub>; SO<sub>x</sub> (as SO<sub>2</sub>) - 0.53 lb/hr; PM<sub>10</sub> - 3.40 lb/hr; CO - 6.20 lb/hr and 6.0 ppmvd @ 15% O<sub>2</sub>; or VOC (as methane) - 1.60 lb/hr and 2.0 ppmvd @ 15% O<sub>2</sub>. All emission concentration limits are based on three hour rolling averages. [District Rules 2201, 4001, and 4703]
15. Ammonia (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 6.54 lb/hr or 10 ppmvd @ 15% O<sub>2</sub> (based on a 24 hour rolling average). [District Rules 2201 and 4102]
16. Each one hour period in a three hour rolling average will commence on the hour. The three hour average will be compiled from the three most recent one hour periods. Each one hour period in a twenty-four hour average will commence on the hour. [District Rule 2201]
17. Emissions from this unit, on days when a startup and/or shutdown occurs, shall not exceed the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 133.5 lb/day; SO<sub>x</sub> (as SO<sub>2</sub>) - 12.7 lb/day; PM<sub>10</sub> - 81.6 lb/day; CO - 148.8 lb/day; or VOC - 38.4 lb/day. [District Rule 2201]
18. Annual emissions from the CTG, calculated on a twelve consecutive month rolling basis, shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 19,009 lb/year; SO<sub>x</sub> (as SO<sub>2</sub>) - 1,656 lb/year; PM<sub>10</sub> - 10,618 lb/year; CO - 19,363 lb/year; or VOC - 4,997 lb/year. [District Rule 2201]
19. Daily emissions will be compiled for a twenty-four hour period starting and ending at twelve-midnight. Each month in the twelve consecutive month rolling average emissions shall commence at the beginning of the first day of the month. The twelve consecutive month rolling average emissions to determine compliance with annual emissions limitations shall be compiled from the twelve most recent calendar months. [District Rule 2201]
20. Compliance with the ammonia emission limits shall be demonstrated by calculating the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rule 4102]
21. Source testing to measure startup NO<sub>x</sub>, CO, and VOC mass emission rates shall be conducted at least once every seven years. CEM relative accuracy audit (RAA) shall be determined during startup source testing in accordance with 40 CFR 60, Appendix F. [District Rule 1081]
22. Source testing to measure the NO<sub>x</sub>, CO, VOC, and NH<sub>3</sub> emission rates (lb/hr and ppmvd @ 15% O<sub>2</sub>) and PM<sub>10</sub> emission rate (lb/hr) shall be conducted at least once every twelve months. [District Rules 1081 and 4703]
23. Compliance with natural gas sulfur content limit shall be demonstrated weekly, except after demonstrating compliance with the fuel sulfur content limit for 8 consecutive weeks for a fuel source, then the testing frequency shall not be less than quarterly. If a test shows noncompliance with the sulfur content requirement, the facility must return to weekly testing until eight consecutive weeks show compliance. [District Rules 1081, 2540, and 4001]
24. Compliance demonstration (source testing) shall be District witnessed or authorized and samples shall be collected by a certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
25. The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E or 20, PM<sub>10</sub> - EPA Method 5 (front half and back half), CO - EPA Method 10 or 10B, O<sub>2</sub> - EPA Method 3, 3A, or 20, VOC - EPA Method 18 or 25, ammonia - BAAQMD ST-1B, and fuel gas sulfur content - ASTM D3246. NO<sub>x</sub> test results shall be corrected to ISO standard conditions as defined in 40 CFR Part 60 Subpart GG Section 60.335. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081, 4001, and 4703]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703]
27. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rules 2201 and 4703]
28. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703]
29. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080]
30. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080]
31. For the CO CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080]
32. For the NOx and O2 CEMs, the owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 75, Appendix A, at least once every two operating quarters, unless incentive criteria has been met which allows the RATA to be performed once every fourth operating quarter. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 75, Appendix A. [District Rule 1080]
33. Permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
34. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
35. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080]
36. Operator shall submit a semiannual report to the APCO listing any period during which the sulfur content of the fuel being fired in the gas turbine exceeded 0.8% by weight. [District Rule 4001]
37. Permittee shall provide notification and recordkeeping as required under 40 CFR, Part 60, Subpart A, 60.7. [District Rule 4001]
38. Permittee shall submit an application to comply with Rule 2520 - Federally Mandated Operating Permits within twelve months of commencing operation. [District Rule 2520]
39. Permittee shall submit an application to comply with Rule 2540 - Acid Rain Program. [District Rule 2540]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

40. Disturbances of soil related to any construction, demolition, excavation, extraction, and other earthmoving activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8021 (11/15/01) unless specifically exempted under section 4.0 of Rule 8021. [District Rule 8021]
41. Outdoor handling, storage, and transport of any bulk material shall comply with the requirements of SJVUAPCD District Rule 8031 (11/15/01), unless specifically exempted under section 4.0 of Rule 8031. [District Rule 8031]
42. All sites that are subject to SJVUAPCD District Rule 8021, SJVUAPCD District Rule 8031, and SJVUAPCD District Rule 8071 shall comply with the requirements of SJVUAPCD District Rule 8041 (11/15/01), unless specifically exempted under section 4.0 of Rule 8041. [District Rule 8041]
43. Any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused or vacant for more than seven days shall comply with the requirements of SJVUAPCD District Rule 8051 (11/15/01), unless specifically exempted under section 4.0 of Rule 8051. [District Rule 8051]
44. Any new or existing public or private paved or unpaved road, road construction project, or road modification project shall implement the control measures and design criteria of, and comply with the requirements of SJVUAPCD District Rule 8061 (11/15/01) unless specifically exempted under section 4.0 of Rule 8061. [District Rule 8061]
45. Any unpaved vehicle/equipment traffic area of 1.0 acre or larger shall comply with the requirements of SJVUAPCD District Rule 8071 (11/15/01), unless specifically exempted under section 4.0 of Rule 8071. [District Rule 8071]
46. Any off-field agricultural sources shall comply with the requirements of SJVUAPCD District Rule 8081 (11/15/01), unless specifically exempted under section 4.0 of Rule 8081. [District Rule 8081]

These terms and conditions are part of the Facility-wide Permit to Operate.

# Attachment D

## Comparison of Amended District Regulation VIII Rules

**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8011 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. The provisions of this rule shall be effective on and after May 15, 2002.	X	
The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>3.0 DEFINITIONS</b>		
Event material: wind, storm, or water erosion and runoff resulting in the accumulation of mud, soil, or other material onto a public paved road surface travel lane or shoulder.		Added
Gravel Pad: a layer of washed gravel, rock, or crushed rock which is at least one inch or larger in diameter and six inches deep, located at the point of intersection of a paved public roadway and a work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.	X	
Gravel Pad: a layer of washed gravel, rock, or crushed rock located at the point of intersection of a paved public roadway and an unpaved work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.		X
Modified Road: any road that is widened or improved so as to increase traffic capacity or that has been reconstructed. This term does not include road maintenance, repair, chip seal, or surface overlay work.	X	
Modified Road: any road that is widened or improved so as to increase traffic capacity or that has been reconstructed. This term does not include road maintenance, repair, chip seal, pavement or roadbed rehabilitation that does not affect roadway geometrics, or surface overlay work.		X

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Paved Road: any road that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.	X	
Paved Road/Area: any road/area that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.		X
Rural: areas not classified as urban constitute "rural."		Added
Stabilized Unpaved Road: any unpaved road, or unpaved vehicle/equipment traffic area surface which meets the definition of stabilized surface as determined by the test methods in Appendix B, Section 3 of this rule, and where VDE is limited to 20% opacity.	X	
Stabilized Unpaved Road/Unpaved shoulder: any unpaved road, unpaved shoulder, or unpaved vehicle/equipment traffic area surface which meets the definition of stabilized surface as determined by the test methods in Appendix B, Section 3 of this rule, and where VDE is limited to 20% opacity.		X
Temporary Unpaved Road: any unpaved road surface which is created to support a temporary or periodic activity, and the use of such road surface is limited to vehicle access for a period of not more than six months during any consecutive three-year period. Temporary unpaved roads must also comply with the definition of section 3.59.		Added
Unpaved Access/Haul Road: any road or path that is not covered by one of the materials described in the paved road definition that is associated with any construction, demolition, excavation, extraction, and other earthmoving activity and used by vehicles, equipment, haul trucks, or any conveyances to travel within a site, to move materials from one part of a site to another part within the same site, or to provide temporary access to a site.		Added
Vehicle Trips Per Day: The 24-hour total (midnight to midnight) count of all vehicles traveling over a survey point on a road segment or unpaved vehicle/equipment traffic area. The survey point must represent the most heavily traveled portion of the road segment or unpaved vehicle/equipment traffic area. Trips made by "implements of husbandry" as defined in California Vehicle Code Division 16, Sections 36000 through 36017 shall not be included in the "vehicle trips per day" count.	X	
Vehicle Daily Trips (VDT): The 24-hour total (midnight to midnight) count of all vehicles traveling over a survey point on a road segment or unpaved vehicle/equipment traffic area. The survey point must represent the most heavily traveled portion of the road segment or unpaved vehicle/equipment traffic area.		X
Wind Barrier: a fence or structure constructed, or row of trees planted, to reduce the amount of entrained fugitive dust.	X	

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Wind Barrier: a fence or structure constructed, or row of trees planted, to reduce the shearing effects caused by wind thereby reducing or eliminating the amount of entrained fugitive dust.		X
Wind Generated Fugitive Dust: visible emissions from any disturbed surface area which are generated by wind action alone.		Added
Workday: a day on which work is performed as distinguished from a day off. For the purposes of this Regulation, a workday may be any period of hours or shift within a 24-hour period.		Added
<b>7.0 Fugitive PM10 Management Plan for Unpaved Roads and Unpaved Vehicle/Equipment Traffic Areas</b>		
As a compliance alternative for Rule 8061 section 5.2 and Rule 8071 section 5.1, an operator may implement a Fugitive PM10 Management Plan (FPMP) that is designed to achieve 50% control efficiency and has been approved by the APCO. The FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, 75 vehicle trips per day. The owner/operator remains subject to all requirements of the applicable rules of Regulation VIII that are not addressed by the FPMP. It should be noted that the FPMP is not a compliance option for any requirement for a stabilized surface as defined in Rule 8011. The requirements for FPMPs for agricultural sources are specified in Rule 8081 (Agricultural Sources) section 7.0.	X	
As a compliance alternative for Rule 8061 section 5.2 and Rule 8071 section 5.1, an operator may implement a Fugitive PM10 Management Plan (FPMP) that is designed to achieve 50% control efficiency and has been approved by the APCO. The FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, the number of annual average daily vehicle trips or vehicle trips per day as specified in Rules 8061, 8071, and 8081. The owner/operator remains subject to all requirements of the applicable rules of Regulation VIII that are not addressed by the FPMP. It should be noted that the FPMP is not a compliance option for any requirement for a stabilized surface as defined in Rule 8011. The requirements for FPMPs for agricultural sources are specified in Rule 8081 (Agricultural Sources) section 7.0.		X
The months (and weeks, if known) of the year that vehicle traffic is expected to exceed 75 vehicle trips per day, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, 75 vehicle trips per day.	X	
The months (and weeks, if known) of the year that vehicle traffic is expected to reach or exceed the number of vehicle trips as specified in Rules 8061, 8071, and 8081, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, the number of vehicle trips as specified		X

<b>Comparison of Requirements</b>	<b>Adopted 11/15/01</b>	<b>Amended 8/19/04</b>
in Rules 8061, 8071, and 8081.		



**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8021 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>4.0 Exemptions</b>		
Mowing, disking, or cutting of weeds and dried vegetation related to fire prevention required by a Federal, State or local agency on a site less than one-half (½) acre. Activities performed in conjunction with mowing and cutting are not exempt from complying with the provisions of other applicable rules under Regulation VIII.	X	
Disking of weeds and dried vegetation related to fire prevention required by a Federal, State or local agency on a site less than one-half (½) acre. Activities performed in conjunction with disking are not exempt from complying with the provisions of other applicable rules under Regulation VIII.		X
The spreading of landfill daily cover necessary to cover.	X	
The spreading of landfill daily cover necessary to cover garbage/rubbish in order to preserve public health and safety and to comply with the requirements of the California Integrated Waste Management Board during wind conditions which would generate fugitive dust.		X
<b>5.0 Requirements</b>		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
No person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.	X	
No person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 through 5.5 are sufficiently implemented to limit VDE to 20% opacity and comply with the conditions for a stabilized surface area when applicable. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.		X
A person shall implement the requirements specified in Table 8021-1 when using wrecking balls or other wrecking equipment to raze or demolish buildings.	X	
A person shall implement the requirements specified below when using wrecking balls or other wrecking equipment to raze or demolish buildings.		X
Apply sufficient water to building exterior surfaces, unpaved surface areas where equipment will operate, and razed building materials to limit VDE to 20% opacity throughout the duration of razing and demolition activities.		Added
Apply sufficient dust suppressants to unpaved surface areas within 100 feet where materials from razing or demolition activities will fall in order to limit VDE to 20% opacity.		Added
Apply sufficient dust suppressants to unpaved surface areas where wrecking or hauling equipment will be operated in order to limit VDE to 20% opacity.		Added
Handling, storage, and transport of bulk materials on-site or off-site resulting from the demolition or razing of buildings shall comply with the requirements specified in Rule 8031 (Bulk Materials).		Added
Apply water within 1 hour of demolition to unpaved surfaces within 100 feet of the demolished structure.		Added
Prevention and removal of carryout or trackout on paved public access roads from demolition operations shall be performed in accordance with Rule 8041 (Carryout and Trackout).		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p style="text-align: center;"><b>Table 8021-1 CONTROL MEASURES FOR DEMOLITION ACTIVITIES</b></p> <p><b>A. DURING ACTIVE DEMOLITION OPERATIONS:</b></p> <p>A1 Apply sufficient water to building exterior surfaces and razed building materials to limit VDE to 20% opacity throughout the duration of razing and demolition activities; and</p> <p>A2 Apply sufficient dust suppressants to unpaved surface areas where materials from razing or demolition activities will fall, or where wrecking or hauling equipment will be operated, in order to limit VDE to 20% opacity; and</p> <p>A3 Handling, storage, and transport of bulk materials on-site or off-site resulting from the demolition or razing of buildings shall comply with the requirements specified in Rule 8031 (Bulk Materials); and</p> <p>A4 Prevention and removal of carryout or trackout on paved public access roads from demolition operations shall be performed in accordance with Rule 8041 (Carryout and Trackout).</p>	Deleted	
<p><b>Table 8021-2 – CONTROL MEASURE OPTIONS FOR CONSTRUCTION, EXCAVATION, EXTRACTION, AND OTHER EARTHMOVING ACTIVITIES</b></p>	X	
<p><b>Table 8021-1 – CONTROL MEASURE OPTIONS FOR CONSTRUCTION, EXCAVATION, EXTRACTION, AND OTHER EARTHMOVING ACTIVITIES</b></p>		X
<p><b>5.3 Speed Limitations and Posting of Speed Limit Signs on Uncontrolled Unpaved Access/Haul Roads on Construction Sites</b></p> <p>5.3.1 An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.</p> <p>5.3.1 An owner/operator shall post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.</p>		Added
<p><b>5.4 Wind Generated Fugitive Dust Requirements</b></p> <p>5.4.1 Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.</p> <p>5.4.1 Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.</p>		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
6.3.1 An owner/operator shall submit a Dust Control Plan to the APCO at least 30 days prior to the start of any construction activity on any site that will include 40 acres or more of disturbed surface area, or will include moving, more than 2,500 cubic yards per day of bulk materials on at least three days. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for commercial, industrial, or institutional purposes or conducted by any governmental entity.	X	
6.3.1 An owner/operator shall submit a Dust Control Plan to the APCO prior to the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least three days. Construction activities shall not commence until the APCO has approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for residential and non-residential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity.		X
6.3.4 A Dust Control Plan shall contain all the information described in Section 6.3.6 of this rule. The APCO shall approve, disapprove, or conditionally approve the Dust Control Plan.	X	
6.3.4 A Dust Control Plan shall contain all the information described in Section 6.3.6 of this rule. The APCO shall approve, disapprove, or conditionally approve the Dust Control Plan within 30 days of plan submittal. A Dust Control Plan is deemed automatically approved if, after 30 days following receipt by the District, the District does not provide any comments to the owner/operator regarding the Dust Control Plan.		X
6.3.6.1 Name(s), address(es), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the preparation, submittal, and implementation of the Dust Control Plan and responsible for the dust generating operation and dust generating application.	X	
6.3.6.1 Name(s), address(es), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the preparation, submittal, and implementation of the Dust Control Plan and responsible for the dust generating operation and the application of dust control measures.		X
6.3.6.8 At least one key individual representing the owner/operator or any person who prepares a Dust Control Plan must complete a Dust Control Training Class conducted by the District. The District will conduct Dust Control Training Classes on an as needed basis.		Added
6.4 District Notification of Earthmoving Activities on Smaller Construction Sites		Added

<b>Comparison of Requirements</b>	<b>Adopted 11/15/01</b>	<b>Amended 8/19/04</b>
<p>6.4.1 On residential development construction sites ranging from 1.0 to less than 10.0 acres in area, an owner/operator shall provide written notification to the District at least 48 hours prior to his/her intent to commence any earthmoving activities.</p> <p>6.4.2 On non-residential development construction sites ranging from 1.0 to less than 5.0 acres in area, an owner/operator shall provide written notification to the District at least 48 hours prior to his/her intent to commence any earthmoving activities.</p>		

**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8031 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
This rule applies to the outdoor handling, storage, and transport of any bulk material. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to the outdoor handling, storage, and transport of any bulk material. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>4.0 Exemptions</b>		
4.4 Outdoor storage and handling of any bulk material at a single site where the total material stored is less than 100 cubic yards.	X	
4.4 Outdoor storage of any bulk material at a single site where no material is actively being added or removed at the end of the workday or overnight and where the total material stored is less than 100 cubic yards.		X
<b>5.0 Requirements</b>		
A2 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, control measure A1 shall also be implemented		Added
A4 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity. If utilizing fences or wind barriers, control measure A1 shall also be implemented.	X	
B3 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or;		X
B4 Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.		Added

**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8041 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
This rule applies to all sites that are subject to Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) where carryout or trackout has occurred or may occur. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to all sites that are subject to any of the following rules where carryout or trackout has occurred or may occur on paved public roads or the paved shoulders of a paved public road: Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), 8061 (Paved and Unpaved Roads), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>5.0 Requirements</b>		
5.1 Owners/operators of sites not identified in Sections 5.2 through 5.5 shall remove all visible carryout and trackout at the end of each workday.	X	
5.1 Owners/operators shall remove all visible carryout and trackout at the end of each workday.		X
5.2 Within urban area, if carryout and trackout extends less than 50 feet from the nearest exit point of a site, the owner/operator shall remove all visible carryout and trackout at the end of each workday.	Deleted	
5.3 An owner/operator of any site with 150 or more vehicle trips per day shall prevent carryout and trackout as specified in Section 5.8.	X	
5.2 An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall take the actions for carryout and trackout as specified in Section 5.8.		X
5.4 An owner/operator subject to the requirements of a Dust Control Plan as specified in Rule 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities) shall prevent carryout and trackout as specified in Section 5.8.	X	

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
5.3 An owner/operator subject to the requirements of a Dust Control Plan as specified in Rule 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities) shall take the actions for carryout and trackout as specified in Section 5.8.		X
5.5 Within urban areas or, an owner/operator shall prevent or immediately remove carryout and trackout when it extends more than 50 feet from the nearest exit point of a site.	X	
5.4 Within urban areas or, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.		X
5.5 Within rural areas, construction projects 10 acres or more in size, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.		Added
5.7.3 Operating a PM10-efficient street sweeper that has a pick-up efficiency of at least 80 percent as determined by using the Street Sweeper Compliance Testing Method described in South Coast Air Quality Management District Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations).	X	
5.7.3 Operating a PM10-efficient street sweeper that has a pick-up efficiency of at least 80 percent as defined in Rule 8011 (General Requirements).		X
5.7.4 Flushing with water, if curbs or gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.		Added
5.8 Prevention of carryout and trackout shall be 5.8.1 Installing and maintaining a trackout control device at all access points to paved public roads; or 5.8.1.3 Maintaining sufficient length of paved interior roads to allow mud and dirt to drop off of vehicles before exiting the site; or 5.8.1.4 Removing deposits of mud and dirt accumulated on paved interior roads with sufficient frequency to prevent carryout and trackout onto paved public roads.	X	



Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>5.8 Carryout and trackout shall be prevented and mitigated as specified in sections 5.8.1 and 5.8.2:</p> <p>5.8.1 Prevented by:</p> <p>5.8.1.1 Installing and maintaining a trackout control device meeting the specifications contained in Section 5.9 at all access points to paved public roads; or</p> <p>5.8.1.2 Utilizing a carryout and trackout prevention procedure which has been demonstrated to the satisfaction of the APCO and US EPA as achieving an equivalent or greater level of control than specified in Section 5.8.1.1.</p> <p>5.8.2 Mitigated by:</p> <p>In the event that measures specified in Section 5.8.1 are insufficient to prevent carryout and trackout, removal of any carryout and trackout must be accomplished within one-half hour of the generation of such carryout and trackout.</p>		X
<p>5.9 Specifications for Section 5.8.1 shall meet the following conditions or combination of conditions:</p> <p>5.9.1 For use of grizzlies or other similar devices designed to removed dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.</p> <p>5.9.2 For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.</p> <p>5.9.3 For use of paving, paved surfaces shall extend from the intersection with the public paved road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the site. Mud and dirt deposits accumulating on paved interior roads shall be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto paved public roads</p>		Added

**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8051 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
This rule applies to any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused, or vacant for more than seven days. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to any open area having 0.5 acres or more within urban areas, or 3.0 acres or more within rural areas; and contains at least 1000 square feet of disturbed surface area. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>4.0 Exemptions</b>		
4.1. Any weed abatement activity utilizing mowing and/or cutting, and which leaves at least three inches of stubble immediately after such mowing/cutting has occurred.		X
<b>5.0 Requirements</b>		
<p>A. OPEN AREAS:</p> <p>Implement, apply, maintain, and reapply if necessary, at least one or a combination of the following control measures to comply at all times with the conditions for a stabilized surface and limit VDE to 20% opacity as defined in Rule 8011:</p> <p>A1 Apply and maintain water or dust suppressant(s) to all unvegetated areas sufficient to limit VDE to 20% opacity; or</p> <p>A2 Establish vegetation on all previously disturbed areas sufficient to limit VDE to 20% opacity; or</p> <p>A3 Pave, apply and maintain gravel, or apply and maintain chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity.</p>	X	
<p>A. OPEN AREAS:</p> <p>Implement, apply, maintain, and reapply if necessary, at least one or a combination of the following control measures to comply at all times with the conditions for a stabilized surface and limit VDE to 20% opacity as defined in Rule 8011:</p> <p>A1 Apply and maintain water or dust suppressant(s) to all unvegetated areas; or</p> <p>A2 Establish vegetation on all previously disturbed areas; or</p> <p>A3 Pave, apply and maintain gravel, or apply and maintain chemical/organic stabilizers/suppressants.</p>		X

**Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8061 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<b>2.0 APPLICABILITY</b>		
This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
<b>4.0 Exemptions</b>		
<p>In addition to the exemptions established in Rule 8011, the following exemptions are established for this Rule:</p> <p>4.1 Any unpaved road segment with less than 26 75 vehicle trips for that day. If 75 vehicle trips for that day will be exceeded, an owner/operator shall comply with the applicable requirements of this Rule.</p> <p>4.2 Maintenance and resurfacing of existing paved roads.</p> <p>4.3 Agricultural sources subject to, or specifically exempt from, Rule 8081 (Agricultural Sources)</p>	X	
<p>In addition to the exemptions established in Rule 8011, the following exemptions are established for this Rule:</p> <p>4.1 Any unpaved road segment with less than 26 annual average daily vehicle trips (AADT).</p> <p>4.1.1 This exemption shall not apply to Section 5.2.3 of this rule.</p> <p>4.1.2 An owner/operator of any unpaved road segment with 26 or more AADT must provide estimated or actual vehicle trip data to the APCO by July 1, 2005.</p> <p>4.2 Maintenance and resurfacing of existing paved roads does not apply to section 5.2 of this rule.</p> <p>4.3 Agricultural sources subject to, or specifically exempt from, Rule 8081 (Agricultural Sources)</p> <p>4.4 Emergency activities performed to ensure public health and safety as specified in Rule 8011, section 4.1.</p> <p>4.5 Equipment used to remove debris beyond the capabilities of PM10-efficient street sweepers.</p>		X
<b>5.0 Requirements</b>		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04						
<p>5.1 New/Modified Paved Road</p> <p>5.1.1 An owner/operator having jurisdiction over, or ownership of, public or private paved roads shall construct, or require to be constructed, all new or modified paved roads in conformance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines for width of shoulders and median shoulders as specified below:</p> <p>5.1.1.1 New paved roads or modifications to existing paved roads with projected average daily vehicle trips of 500 vehicles or more shall be constructed with paved shoulders that meet following widths:</p> <table border="1" data-bbox="180 583 837 687"> <thead> <tr> <th data-bbox="180 583 509 638">Annual Average Daily Vehicle Trips (AADT)</th> <th data-bbox="509 583 837 638"><i>Minimum Paved or Stabilized Shoulder Width in Feet</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="180 638 509 661">500-3000</td> <td data-bbox="509 638 837 661">4 r</td> </tr> <tr> <td data-bbox="180 661 509 687">Greater than 3000</td> <td data-bbox="509 661 837 687">8</td> </tr> </tbody> </table> <p>5.1.1.2 A curbing adjacent to and contiguous with the travel lane or paved shoulder of a road may be constructed, in lieu of meeting the paved shoulder width standard in Section 5.1.1.1.</p> <p>5.1.1.3 Intersections, auxiliary entry lanes, and auxiliary exit lanes may be constructed adjacent to and contiguous with the roadway, in lieu of meeting the paved shoulder width standard in Section 5.1.1.1.</p> <p>5.1.1.4 New paved road construction or modifications to an existing paved road that are required to comply with California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) determinations regarding environmental, cultural, archaeological, historical, or other considerations addressed in such documents, are exempt from the paved shoulder width requirements specified in Section 5.1 of this rule.</p> <p>5.1.1.5 Whenever any paved road which has projected annual average daily vehicle trips of 500 or more is constructed, or modified with medians, the medians shall be constructed with paved shoulders having a minimum width of four feet adjacent to the traffic lanes unless:</p> <p>5.1.1.5.1 The medians of roads having speed limits set at or below 45 miles per hour are constructed with curbing; or</p> <p>5.1.1.5.2 The medians are landscaped and maintained with grass or other vegetative ground cover to comply with the definition of stabilized surface in Rule 8011.</p> <p>5.1.2 In lieu of complying with the paving or vegetation requirements of Section 5.1.1, the agency, owner, or operator may apply oils or other chemical/organic suppressants/stabilizers as defined in Rule 8011 to the required width of shoulder and median areas as specified in Section 5.1.1. The material shall be reapplied and maintained to limit VDE to 20% opacity and fulfill conditions for a stabilized surface as specified in Rule 8011.</p>	Annual Average Daily Vehicle Trips (AADT)	<i>Minimum Paved or Stabilized Shoulder Width in Feet</i>	500-3000	4 r	Greater than 3000	8	X	
Annual Average Daily Vehicle Trips (AADT)	<i>Minimum Paved or Stabilized Shoulder Width in Feet</i>							
500-3000	4 r							
Greater than 3000	8							

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04						
<p>5.1 Paved Roads</p> <p>5.1.1 New or Modified Paved Roads:</p> <p>5.1.1.1 An owner/operator having jurisdiction over, or ownership of, public or private paved roads shall construct, or require to be constructed, all new or modified paved roads in conformance with the American Association of State Highway and Transportation Officials (AASHTO) guidelines for width of shoulders and for median shoulders as specified in section 5.1.1.2 of this rule as specified below:</p> <p>5.1.1.1.1 New paved roads or modifications to existing paved roads with projected annual average daily vehicle trips of 500 vehicles or more shall be constructed with paved shoulders that meet following widths:</p> <table border="1" data-bbox="180 644 850 798"> <thead> <tr> <th data-bbox="180 644 516 697">Annual Average Daily Vehicle Trips (AADT)</th> <th data-bbox="516 644 850 697"><i>Minimum Paved or Stabilized Shoulder Width</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="180 697 516 740">500-3000</td> <td data-bbox="516 697 850 740">4 feet or limit of right-of-way, whichever is the lesser</td> </tr> <tr> <td data-bbox="180 740 516 798">Greater than 3000</td> <td data-bbox="516 740 850 798">8 feet or limit of right-of-way, whichever is the lesser</td> </tr> </tbody> </table> <p>5.1.1.1.2 A curbing adjacent to and contiguous with the travel lane or paved shoulder of a road may be constructed, in lieu of meeting the paved shoulder width standard in Section 5.1.1.1.1</p> <p>5.1.1.1.3 Intersections, auxiliary entry lanes, and auxiliary exit lanes may be constructed adjacent to and contiguous with the roadway, in lieu of meeting the paved shoulder width standard in Section 5.1.1.1.1</p> <p>5.1.1.1.4 Where the requirements specified in Section 5.1.1.1.1 are shown to conflict with the requirements of the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) with respect to determinations regarding environmental, cultural, archaeological, historical, or other considerations addressed in such documents, an owner/operator is exempt from the paved shoulder width requirements specified in Section 5.1.1.1.1 of this rule.</p> <p>5.1.1.2 Whenever any paved road which has projected annual average daily vehicle trips of 500 or more is constructed, or modified with medians, the medians shall be constructed in conformance with the AASHTO guidelines for width of median shoulders, with paved shoulders having a minimum width of four feet adjacent to the traffic lanes unless:</p> <p>5.1.1.2.1 The medians of roads having speed limits set at or below 45 miles per hour are constructed with curbing; or</p> <p>5.1.1.2.2 The medians are landscaped and maintained with grass or other vegetative ground cover or chemical/organic dust suppressants/stabilizers to comply with the definition of stabilized surface in Rule 8011.</p>	Annual Average Daily Vehicle Trips (AADT)	<i>Minimum Paved or Stabilized Shoulder Width</i>	500-3000	4 feet or limit of right-of-way, whichever is the lesser	Greater than 3000	8 feet or limit of right-of-way, whichever is the lesser		X
Annual Average Daily Vehicle Trips (AADT)	<i>Minimum Paved or Stabilized Shoulder Width</i>							
500-3000	4 feet or limit of right-of-way, whichever is the lesser							
Greater than 3000	8 feet or limit of right-of-way, whichever is the lesser							

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>5.1.2 PM10-Efficient Street Sweepers: Each city, county, or state agency with primary responsibility for any existing paved road within an urban area shall take the following actions:</p> <p>5.1.2.1 Effective July 1, 2005, all purchases of street sweeper equipment by such agency or their contractor(s) shall be only PM10-efficient street sweepers.</p> <p>5.1.2.2 The utilization of PM10-efficient street sweepers by an agency or its contractor(s) shall be prioritized for use on routine street sweeper route(s) with paved curbs which have been determined by an agency to have the greatest actual or potential for dirt and silt loadings.</p> <p>5.1.2.3 Any agency which conducts or contracts for routine street sweeping activities or services shall purchase, or require their contractor(s) to purchase and place into service, at least one PM10-efficient street sweeper not later than July 1, 2008.</p> <p>5.1.2.4 Any street sweeping routes with paved curbs covered by PM10-efficient street sweepers pursuant to Section 5.1.2.2 shall conduct routine street sweeping operations over such routes at a frequency of not less than once per month.</p> <p>5.1.2.5 All PM10-efficient street sweepers shall be operated and maintained according to manufacturer specifications.</p> <p>5.1.2.6 If the provisions of Sections 5.1.2.1 or 5.1.2.3 cannot be met due to budgetary constraints, the agency may submit a statement of financial hardship to, and approved by, the APCO and US EPA.</p>		Added
<p>5.1.3 Post-Event Clean-Up Each city, county, or state agency with primary responsibility for any existing paved road shall take the following actions upon discovery by the city, county or state agency of accumulations of mud/dirt [event material] of at least 1 inch thickness over an area of at least 50 square feet on road surface travel lanes as a result of wind/storm/water erosion and runoff:</p> <p>5.1.3.1 Within 24 hours of discovery by the city, county or state agency of such condition, remove the mud/dirt from the travel lanes or restrict vehicles from traveling over said mud/dirt until such time as the material can be removed from the travel lanes.</p> <p>5.1.3.2 Follow dust minimizing practices during the removal of such mud/dirt from the travel lanes.</p> <p>5.1.3.3 In the event unsafe travel conditions would result from restricting vehicle traffic pursuant to Section 5.1.3.1, and removal of such material is not possible within 72 hours due to weekend or holiday conditions, the provisions of Section 5.1.3.1 can be extended upon notification to and approval by the APCO.</p> <p>5.1.3.4 As soon as practicable, removal of mud/dirt from paved shoulders should also occur through the use of dust minimizing practices</p>		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>5.2 Unpaved Road Segment</p> <p>5.2.1. On each day that 75 or more vehicle trips will occur on an unpaved road segment, the owner/operator shall limit VDE to 20% opacity from the unpaved road segment by application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</p> <p>5.2.1.1 Watering;</p> <p>5.2.1.2 Uniform layer of washed gravel;</p> <p>5.2.1.3 Chemical/organic dust suppressant;</p> <p>5.2.1.4 Vegetative materials;</p> <p>5.2.1.5 Paving;</p> <p>5.2.1.6 Any other method that effectively limits VDE to 20% opacity.</p> <p>5.2.2 On each day that 100 or more vehicle trips will occur on an unpaved road segment, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road surface by the application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</p> <p>5.2.2.1 Watering;</p> <p>5.2.2.2 Chemical/organic stabilizers/suppressants in accordance with the manufacturer's specifications;</p> <p>5.2.2.3 Roadmix;</p> <p>5.2.2.4 Paving;</p> <p>5.2.2.5 Any other method that results in a stabilized unpaved road surface.</p>	X	
<p>5.2 Unpaved Road Segment</p> <p>5.2.1. On any unpaved road segment with 26 or more AADT, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</p> <p>5.2.1.1 Watering;</p> <p>5.2.1.2 Uniform layer of washed gravel;</p> <p>5.2.1.3 Chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications;</p> <p>5.2.1.4 Roadmix;</p> <p>5.2.1.5 Paving;</p> <p>5.2.1.6 Any other method that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20% opacity and meets the conditions of a stabilized unpaved road.</p>		X

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>5.2.2 Within an urban area, the construction of any new unpaved road is prohibited unless the road meets the definition of a temporary unpaved road as specified in section 3.60 of Rule 8011.</p> <p>5.2.3 Requirements for Existing Unpaved Public Roads in Urban and Rural Areas:</p> <p>5.2.3.1 Each city, county, or state agency with primary responsibility for any existing unpaved road within urban and rural areas shall take the following actions:</p> <p>5.2.3.1.1 By January 1, 2005 provide the District with a list of all unpaved roads under its jurisdiction in any urban area(s), including data on length of, and AADT on, each unpaved road segment.</p> <p>5.2.3.1.2 By July 1, 2005 provide the District with a list of all unpaved roads under its jurisdiction in any rural area, including data on length of, and AADT on, each unpaved road segment.</p> <p>5.2.3.1.3 By January 1, 2010, pave an average of 20% annually of all unpaved roads identified in Section 5.2.3.1.1 up to a maximum of 5 cumulative miles within any one urban area, with priority given to roads with the highest AADT levels. In meeting this requirement, each jurisdiction must show incremental progress.</p> <p>5.2.3.1.4 By April 1 of each year, 2006 through 2010, submit to the District the total number of unpaved road miles which were paved during the previous calendar year, and the percentage of cumulative miles paved relative to the list provided pursuant to Section 5.2.3.1.1.</p> <p>5.2.3.1.5 If the provisions of Section 5.2.3.1.3 cannot be met due to budgetary constraints, the agency may submit a statement of financial hardship to, and approved by, the APCO and US EPA.</p>		<p>Added</p>



Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>5.2.4 Requirements for Existing Paved Public Roads with Unpaved Shoulders in Urban and Rural Areas:</p> <p>5.2.4.1 Each city, county, or state agency with primary responsibility for any existing paved public road with unpaved shoulders in urban and rural areas shall take the following actions:</p> <p>5.2.4.1.1 By January 1, 2005 provide the District with a list of all paved public roads with unpaved shoulders in any urban and rural area, including data on length of, and AADT on, each segment of paved public road with unpaved shoulders.</p> <p>5.2.4.1.2 In Urban areas, by January 1, 2010, pave or stabilize 4-foot shoulders on 50% of existing paved public roads with the highest AADT in urban areas identified in Section 5.2.4.1.1. In meeting this requirement, each jurisdiction must show incremental progress.</p> <p>5.2.4.1.3 In Rural areas, by January 1, 2010, pave or stabilize 4-foot shoulders on 25% of existing paved public roads with the highest AADT in rural areas identified in Section 5.2.4.1.1. In meeting this requirement, each jurisdiction must show incremental progress.</p> <p>5.2.4.1.4 If the provisions of Sections 5.2.4.1.2 or 5.2.4.1.3 cannot be met due to budgetary constraints, the agency may submit a statement of financial hardship to, and approved by, the APCO and US EPA.</p> <p>5.2.5 Requirements for Establishing and Posting Maximum Speed Limits on Unpaved Roads</p> <p>Each owner/operator shall establish a maximum speed limit of 25 mph on each unpaved road with 26 AADT or more and shall post speed limit signs, one in each direction, per mile of road segment in urban areas, and per two miles of road segment in rural areas. This provision shall become effective one year from the date of adoption of this rule amendment.</p>		Added
<b>6.0 Administrative Requirements</b>		
<p>6.2 Recordkeeping and Reporting</p> <p>In addition to complying with the recordkeeping requirements specified in Rule 8011, city, county and state agencies responsible for the maintenance and operation of public paved and unpaved roads, shall prepare and submit a written report to the District documenting compliance with the provisions of this rule. This report shall be prepared for the years 2001 and 2002, and no less frequently than each two (2) year period thereafter. The reports shall be transmitted to the District no later than 90 days after the end of the calendar year and shall include:</p>	X	

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<p>6.2 Recordkeeping and Reporting            In addition to complying with the recordkeeping requirements specified in Rule 8011 and Sections 5.2.3 and 5.2.4 of this rule, city, county and state agencies responsible for the maintenance and operation of public paved and unpaved roads, shall prepare and submit a written report to the District documenting compliance with the provisions of this rule. This report shall be prepared for the years 2003 and 2004, and no less frequently than each two (2) year period thereafter. The reports shall be transmitted to the District no later than 90 days after the end of the calendar year and shall include:</p>		X
<p>6.2.3 For all road under the agency's jurisdiction, a summary of actions taken to reduce PM10 emissions from roads during the reporting period. Where possible, the total miles of roads for which these procedures were enforced and the estimated traffic volume on the affected roads shall be provided.</p>	X	
<p>6.2.3 For all roads under the agency's jurisdiction, a summary of actions taken to reduce PM10 emissions from roads during the reporting period. The total miles of roads for which these procedures were enforced and the estimated traffic volume on the affected roads shall be provided.</p>		X

**Comparative Analysis of the Current SIP Version (amended September 16, 2004) of District Rule 8071 with the Previous SIP Version (adopted November 15, 2001)**

Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
<b>2.0 APPLICABILITY</b>		
This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to any unpaved vehicle/equipment traffic area. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on September 16, 2004 shall take effect.		X
<b>4.0 Exemptions</b>		
4.1 Unpaved vehicle and equipment traffic areas on any day on which less than 75 vehicle trips occur.	X	
4.1 Unpaved vehicle and equipment traffic areas with less than 50 Average Annual Daily Trips (AADT).		X
<b>5.0 Requirements</b>		
5.1 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity.	X	
5.1 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity and comply with the requirements of a stabilized unpaved road. If vehicle activity originates from and remains exclusively within an unpaved vehicle/equipment traffic area, section 5.2 may be implemented to limit VDE to 20% opacity.		X
5.1.1 On each day that 75 or more vehicle trips will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity from the unpaved vehicle/equipment traffic area by application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements): 5.1.1.1 Watering; 5.1.1.2 Uniform layer of washed gravel; 5.1.1.3 Chemical/organic dust suppressants; 5.1.1.4 Vegetative materials; 5.1.1.5 Paving; 5.1.1.6 Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20% opacity.	X	

Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
<p>5.1.1 Where 50 or more Average Annual Daily Trips (AADT) will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</p> <p>5.1.1.1 Watering;</p> <p>5.1.1.2 Uniform layer of washed gravel;</p> <p>5.1.1.3 Chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications;</p> <p>5.1.1.4 Vegetative materials;</p> <p>5.1.1.5 Paving;</p> <p>5.1.1.6 Roadmix;</p> <p>5.1.1.-7 Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20% opacity and meets the conditions of a stabilized unpaved road.</p>		X
<p>5.1.2 On each day that 100 or more vehicle trips will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</p> <p>5.1.2.1 Watering;</p> <p>5.1.2.2 Chemical/organic stabilizers/suppressants in accordance with the manufacturer's specifications;</p> <p>5.1.2.3 Roadmix;</p> <p>5.1.2.4 Paving.</p> <p>5.1.2.5 Any other method that results in a stabilized unpaved road surface.</p>	Deleted	
<p>5.1.2 For unpaved vehicle/equipment traffic areas with 150 VDT, or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year, the owner/operator shall implement the control options specified in 5.1.1.1 through 5.1.1.7, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements) during the period that the unpaved vehicle/equipment traffic area is utilized.</p>		Added
<p>5.1.3 On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or re-application/maintenance of at least one of the control measures specified sections 5.1.1.1 through 5.1.1.6, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements).</p>		Added

Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
<p>5.1.4 On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator of the unpaved area to be traveled/parked upon must notify the District at least 48 hours in advance when such a special event will occur. During the duration of the special event vehicle travel/parking, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or re-application/maintenance of water or chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications.</p>		Added
<p>5.2 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity.            5.2.1 On each day that 50 or more VDT, or 25 or more VDT with 3 or more axles, originates from within and remains exclusively within an unpaved vehicle/equipment traffic area, the owner/operator may apply/reapply water to limit VDE to 20% opacity.</p>		Added
<p>5.2 An owner/operator shall restrict access and periodically stabilize a disturbed surface area whenever a site remains inactive for seven consecutive calendar days to comply with the conditions for a stabilized surface as defined in Rule 8011.</p>	X	
<p>5.3 An owner/operator shall restrict access and periodically stabilize a disturbed surface area whenever a site becomes inactive to comply with the conditions for a stabilized surface as defined in Rule 8011.</p>		X

# Attachment E

## Stringency Analysis of District Rule 4601

**Stringency Comparison of District Rule 4601 Non-SIP Version (12/17/09) to Current SIP Version (10/31/01)**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
2.0 Applicability	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.	No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.
4.0 Exemptions	The provisions of this rule shall not apply to: 4.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less. 4.3 Any aerosol coating product.	4.1 The provisions of this rule shall not apply to: 4.1.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.1.2 Any aerosol coating product. 4.2 With the exception of Section 6.2, the provisions of this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less.	The only change is to require reporting requirements as discussed in Section 6.2 of the non-SIP approved version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
5.0 Requirements	<b>Note: Section 5.0 requirements refer to Table of Standards, Table of Standards 1, and Table of Standards 2. These tables are included as Attachment X.</b>		
	5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall; 5.1.1 manufacture, blend, or repackage for sale within the District; 5.1.2 supply, sell, or offer for sale within the district; 5.1.3 solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards, after the specified effective date in the Table of Standards.	5.1 VOC Content Limits: Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, or offer for sale within the District; or solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards 1 or the Table of Standards 2, after the specified effective date in the Table of Standards 1 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.	Sections 5.8 and 8.0 of the SIP version are not included in the non-SIP version. As discussed in corresponding sections the non-SIP version is more stringent. The Table of Standards and Table of Standards 1 have the same VOC limits. Table of Standard 2 is more stringent as discussed below. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.
	5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories: 5.2.1 Lacquer coatings (including lacquer sanding sealers) 5.2.2 Metallic pigmented coatings 5.2.3 Shellacs 5.2.4 Fire-retardant coatings 5.2.5 Pretreatment wash primers 5.2.6 Industrial maintenance coatings 5.2.7 Low-solids coatings	5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 1 or the Table of Standards 2. 5.2.1 Effective until December 31, 2010, with the exception of the specialty coating categories specified in Section 5.2.3.1 through 5.2.3.15, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 1, the most restrictive (or lowest) VOC content limit shall apply. 5.2.2 Effective on and after January 1, 2011, with the exception of the	The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>5.2.8 Wood preservatives</p> <p>5.2.9 High temperature coatings</p> <p>5.2.10 Temperature-indicator safety coatings</p> <p>5.2.11 Antenna coatings</p> <p>5.2.12 Antifouling coatings</p> <p>5.2.13 Flow coatings</p> <p>5.2.14 Bituminous roof primers</p> <p>5.2.15 Specialty primers, sealers and undercoaters</p>	<p>specialty coating categories specified in Sections 5.2.3.2, 5.2.3.3, 5.2.3.5 through 5.2.3.9, and 5.2.3.14 through 5.2.3.18, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 2, the most restrictive (or lowest) VOC content limit shall apply.</p> <p>5.2.3 This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf.</p> <p>5.2.3.1 Lacquer coatings (including lacquer sanding sealers)</p> <p>5.2.3.2 Metallic pigmented coatings</p> <p>5.2.3.3 Shellacs</p> <p>5.2.3.4 Fire-retardant coatings</p> <p>5.2.3.5 Pretreatment wash primers</p> <p>5.2.3.6 Industrial maintenance coatings</p> <p>5.2.3.7 Low-solids coatings</p> <p>5.2.3.8 Wood preservatives</p> <p>5.2.3.9 High temperature coatings</p> <p>5.2.3.10 Temperature-indicator safety coatings</p> <p>5.2.3.11 Antenna coatings</p> <p>5.2.3.12 Antifouling coatings</p> <p>5.2.3.13 Flow coatings</p> <p>5.2.3.14 Bituminous roof primers</p> <p>5.2.3.15 Specialty primers, sealers and undercoaters</p> <p>5.2.3.16 Aluminum roof coatings</p> <p>5.2.3.17 Zinc-rich primers</p> <p>5.2.3.18 Wood Coatings</p>	
	<p>5.3 Sell-Through of Coatings:</p> <p>5.3.1 A coating manufactured prior to the January 1, 2003 or January 1, 2004 effective date specified for that coating in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.</p> <p>5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the</p>	<p>5.3 Sell-Through of Coatings:</p> <p>A coating manufactured prior to the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2 may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.</p>	<p><b>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</b></p>



Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Table of Standards may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.</p>		
	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p>5.4 Painting Practices: All architectural coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.</p>	<p><b>No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.</b></p>
	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards.</p>	<p>5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or the Table of Standards 2.</p>	<p><b>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</b></p>
	<p>5.6 Rust Preventative Coatings: Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards.</p>	<p>5.6 Rust Preventative Coatings: Effective through December 31, 2010, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards 1.</p>	<p><b>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</b></p>
	<p>5.7 Coatings Not Listed in the Table of Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Sections 3.21, 3.36 and 3.37 and the corresponding flat or nonflat VOC limit shall apply.</p>	<p>5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards 2: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards 1 or the Table of Standards 2, the VOC content limit shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, and the corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limit in the Table of Standards 1 or the Table of Standards 2 shall apply.</p>	<p><b>The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</b></p>
	<p>5.8 Lacquers: Notwithstanding the provisions of Section 3.1, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater</p>	<p>---</p>	<p><b>This section has been removed. The operation is required to meet the lacquer VOC limit regardless of</b></p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	than 70 percent and temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.		temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version
	5.9 Averaging Compliance Option: On or after January 1, 2003, in lieu of compliance with the specified limits in The Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Section 8.0, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section 5.9 and Section 8.0 shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.	---	This section is removed from the non-SIP version, it is no longer applicable. Therefore, non-SIP version of rule is as stringent as SIP version.
	---	5.8 Prior to January 1, 2011, any coating that meets a definition in Section 3.0 for a coating category listed in the Table of Standards 2 and complies with the applicable VOC limit in the Table of Standards 2 and with Sections 5.2 and 6.1 (including those provision of Section 6.1 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.	Table of Standards 2 is more stringent than the VOC limits of Table of Standards in the SIP-Approved version. Therefore, non-SIP version of rule is as stringent as SIP version.
	Table of Standards (See Attachment X for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment X for Table)	The non-SIP rule requirements are the same as the Table of Standards in the SIP approved rule, except Table of Standards 1 expires at which time Table of Standards 2 is in effect. As discussed below these standards are more stringent. Therefore, non-SIP version of rule is as stringent as SIP version.
		Table of Standards 2 (Effective on and after 1/1/11) (See Attachment X for Table)	The requirements of Table of Standards 2 are more stringent than the Table of Standards in the SIP rule. Therefore, non-SIP version of rule is as stringent as SIP version.
6.0 Administrative Requirements	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the	The non-SIP approved rule contain sections listed in the SIP rule plus

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section</p> <p>6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content.</p> <p>6.1.4 Industrial Maintenance Coatings: In addition to the information specified in Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1 through 6.1.4.3.</p> <p>6.1.4.1 "For industrial use only"</p> <p>6.1.4.2 "For professional use only"</p> <p>6.1.4.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed."</p> <p>6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only"</p> <p>6.1.7 Specialty Primers, Sealers and Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently</p>	<p>information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed.</p> <p>6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.</p> <p>6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.</p> <p>6.1.3 VOC Content: Each container of any coating subject to this rule shall display one of the following values, in grams of VOC per liter of coating:</p> <p>6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or</p> <p>6.1.3.2 VOC Content, as determined from actual formulation data; or</p> <p>6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2.</p> <p>If the manufacturer does not recommend thinning, the container must display the VOC Content, as supplied. If the manufacturer recommends thinning, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system".</p> <p>6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of</p>	<p><b>additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.</b></p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>display one or more of the descriptions listed in Section</p> <p>6.1.7.1 through 6.1.7.5.</p> <p>6.1.7.1 For blocking stains.</p> <p>6.1.7.2 For fire-damaged substrates.</p> <p>6.1.7.3 For smoke-damaged substrates.</p> <p>6.1.7.4 For water-damaged substrates.</p> <p>6.1.7.5 For excessively chalky substrates.</p> <p>6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time.</p> <p>6.1.9 Non-flat – High Gloss Coatings: Effective January 1, 2003, the labels of all non-flat – high gloss coatings shall prominently display the words "High Gloss".</p>	<p>the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.5.1 through 6.1.5.3.</p> <p>6.1.5.1 "For industrial use only"</p> <p>6.1.5.2 "For professional use only"</p> <p>6.1.5.3 "Not for residential use" or "Not intended for residential use"</p> <p>6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." (Category deleted effective January 1, 2011.)</p> <p>6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only".</p> <p>6.1.8 Specialty Primers, Sealers and Undercoaters: Effective until December 31, 2010, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.8.1 through 6.1.8.5. Effective on and after January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 6.1.8.1 through 6.1.8.3. On and after January 1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective.</p> <p>6.1.8.1 For fire-damaged substrates.</p> <p>6.1.8.2 For smoke-damaged substrates.</p> <p>6.1.8.3 For water-damaged substrates.</p> <p>6.1.8.4 For excessively chalky substrates.</p> <p>6.1.8.5 For blocking stains.</p> <p>6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011.)</p> <p>6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer."</p> <p>6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant - For Professional Use Only."</p> <p>6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss coatings shall prominently display the words "High Gloss."</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only."</p> <p>6.1.14 Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display one or more of the following descriptions listed in Section 6.1.14.1 through 6.1.14.3.</p> <p>6.1.14.1 "For industrial use only"</p> <p>6.1.14.2 "For professional use only"</p> <p>6.1.14.3 "Not for residential use" or "Not intended for residential use"</p>	
	<p>6.2 Reporting Requirements</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p>	<p>6.2 Reporting Requirements</p> <p>The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010.</p> <p>6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p> <p>6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an</p>	<p><b>Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version.</b></p>

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.2.4.2 the product category listed in the Table of Standards to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</p>	<p>annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</p> <p>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</p> <p>6.2.4.2 the product category listed in the Table of Standards 1 or the Table of Standards 2 to which the coating belongs;</p> <p>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</p> <p>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</p> <p>6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution.</p> <p>6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales.</p> <p>6.2.7 Effective on and after January 1, 2011, Sales Data: All sales data listed in Sections 6.2.7.1 to 6.2.7.14 shall be maintained on-site by the responsible official for a minimum of three years. A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17.</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>California Code of Regulations Sections 91000-91022. The responsible official shall within 180 days provide information, including, but not limited to the data listed in Sections 6.2.7.1 through 6.2.7.14:</p> <p>6.2.7.1 the name and mailing address of the manufacturer;</p> <p>6.2.7.2 the name, address and telephone number of a contact person;</p> <p>6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category;</p> <p>6.2.7.4 whether the product is marketed for interior or exterior use or both;</p> <p>6.2.7.5 the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart);</p> <p>6.2.7.6 the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed;</p> <p>6.2.7.7 the names and CAS numbers of the VOC constituents in the product;</p> <p>6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition;</p> <p>6.2.7.9 whether the product is marketed as solvent-borne, waterborne, or 100% solids;</p> <p>6.2.7.10 description of resin or binder in the product;</p> <p>6.2.7.11 whether the coating is a single-component or multi-component product;</p> <p>6.2.7.12 the density of the product in pounds per gallon;</p> <p>6.2.7.13 the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition; and</p> <p>6.2.7.14 the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition.</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>6.3 Test Methods</p> <p>6.3.1 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.26 and 3.27, the reference method for VOC content is U.S. EPA Method 24, except as provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Section 6.3.14. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in Section 6.3.12. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 6.3.2, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.2. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.</p> <p>6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the District, the ARB and the U.S. EPA, may also be used. 6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 6.3.15. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.4 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials"(see Section 3, Fire-Retardant Coating).</p> <p>6.3.5 Fire Resistance Rating: The fire</p>	<p>6.3 Test Methods</p> <p>The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA.</p> <p>6.3.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in the Table of Standards 1 or the Table of Standards 2, the VOC content of a coating shall be determined as defined in Section 3.77, 3.78, or 3.79 as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content must include the VOCs emitted during curing.</p> <p>6.3.2 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.77 and 3.79, the reference method for VOC content is EPA Method 24, except as provided in Sections 6.3.3 and 6.3.16. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995), as applicable. To determine the VOC content of a coating, the manufacturer may use EPA Method 24, or an alternative method as provided in Section 6.3.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of EPA Method 24 test and any other means for determining VOC content, the EPA Method 24</p>	<p>The non-SIP version includes all the requirements of the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</p>



Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials"(see Section 3, Fire-Resistive Coating).</p> <p>6.3.6 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss"(see Section 3, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Metallic Pigmented Coating).</p> <p>6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products"(see Section 3, Pre-Treatment Wash Primer).</p> <p>6.3.9 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.</p> <p>6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater).</p> <p>6.3.11 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.12 Exempt Compounds—</p>	<p>test results will govern, except when an alternative method is approved as specified in Section 6.3.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct an EPA Method 24 analysis.</p> <p>6.3.3 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.2 4, after review and approved in writing by the staffs of the District, ARB and EPA, may also be used.</p> <p>6.3.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.</p> <p>6.3.5 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating).</p> <p>6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Tests of Building Construction Materials" (see Section 3.0, Fire-Resistive Coating).</p> <p>6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel).</p> <p>6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish).</p> <p>6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer).</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.13 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1996), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3, Volatile Organic Compound, and Section 6.3.1).</p> <p>6.3.14 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 <i>Code of Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings"(see Section 6.3.1).</p> <p>6.3.15 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 6.3.1).</p> <p>6.3.16 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998) (see Section 6.3.3).</p>	<p>6.3.10 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM D1640-95. (Category deleted effective January 1, 2011.)</p> <p>6.3.11 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). (Category deleted effective January 1, 2011.)</p> <p>6.3.12 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.13 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i> (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</p> <p>6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 <i>Code of</i></p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p><i>Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2).</p> <p>6.3.16 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," <i>SCAQMD Laboratory Methods of Analysis for Enforcement Samples</i>.</p> <p>6.3.17 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998).</p> <p>6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for basement specialty coatings shall be analyzed using ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry".</p> <p>6.3.19 Tub and Tile Refinish Coating Adhesion: The adhesion of tub and tile coating shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test".</p> <p>6.3.20 Tub and Tile Refinish Coating Hardness: The hardness of tub and tile refinish coating shall be determined by ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test".</p> <p>6.3.21 Tub and Tile Refinish Coating Abrasion Resistance: Abrasion resistance of tub and tile refinish coating shall be analyzed by ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser".</p> <p>6.3.22 Tub and Tile Refinish Coating Water Resistance: Water resistance of tub and tile refinish coatings shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method</p>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<p>for Evaluating Degree of Blistering of Paints".</p> <p>6.3.23 Waterproofing Membrane: Waterproofing membrane shall be tested by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course".</p> <p>6.3.24 Mold and Mildew Growth for Basement Specialty Coatings: Mold and mildew growth resistance for basement specialty coatings shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation".</p> <p>6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units".</p> <p>6.3.26 Reactive Penetrating Sealer Water Vapor Transmission: Reactive penetrating sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials".</p> <p>6.3.27 Reactive Penetrating Sealer - Chloride Screening Applications: Reactive penetrating sealers shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures".</p> <p>6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".</p>	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.	No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.
8.0 Averaging Compliance Option	8.1 On or after January 1, 2003, in lieu of compliance with the specified limits in the Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; rust		No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	<p>preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in this Section, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.</p> <p>Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed.</p>		

District Rule 4601 was amended (12/17/2009). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule.