MARCH 8, 2011

Gaylord Edwards
Sycamore Cogeneration Company
PO Box 80598
Bakersfield, CA 93380-0598

Re: Notice of Preliminary Decision - Title V Permit Renewal
   District Facility # S-511
   Project # S-1082628

Dear Mr. Edwards:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Sycamore Cogeneration Company for its cogeneration facility in the center of north 1/2 of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields, 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

Attachments
C: Gurpreet Brar, Permit Services Engineer
MAR 08 2011

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 – Title V Permit Renewal
District Facility # S-511
Project # S-1082628

Dear Mr. Rios:

Enclosed for your review and comment is the District’s analysis of the application to renew the Federally Mandated Operating Permit for Sycamore Cogeneration Company for its cogeneration facility in the center of north ½ of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields, 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

Attachments
C: Gurpreet Brar, Permit Services Engineer

Seyed Sadreedin
Executive Director/Air Pollution Control Officer

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) 230-8061

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

www.valleyair.org www.healthyairliving.com
MAR 08 2011

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

Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # S-511
Project # S-1082628

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Sycamore Cogeneration Company for its cogeneration facility in the center of north ½ of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields, 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.

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Attachments
C: Gurpreet Brar, Permit Services Engineer

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www.valleypai.org www.healthyairliving.com
NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED RENEWAL OF THE FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to Sycamore Cogeneration Company for its cogeneration facility in the center of north 1/2 of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields, California.

The District’s analysis of the legal and factual basis for this proposed action, project #S-1082628, is available for public inspection at 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 renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed 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
AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation
Sycamore Cogeneration Company
S-511

## TABLE OF CONTENTS

| I.   | PROPOSAL | .................................................................................. | 2 |
| II.  | FACILITY LOCATION | .................................................................................. | 3 |
| III. | EQUIPMENT LISTING | .................................................................................. | 3 |
| IV.  | GENERAL PERMIT TEMPLATE USAGE | .................................................................................. | 3 |
| V.   | SCOPE OF EPA AND PUBLIC REVIEW | .................................................................................. | 3 |
| VI.  | FEDERALLY ENFORCEABLE REQUIREMENTS | .................................................................................. | 3 |
| VII. | REQUIREMENTS NOT FEDERALLY ENFORCEABLE | .................................................................................. | 6 |
| VIII. | PERMIT REQUIREMENTS | .................................................................................. | 7 |
| IX.  | PERMIT SHIELD | .................................................................................. | 28 |
| X.   | PERMIT CONDITIONS | .................................................................................. | 29 |
| XI.  | ATTACHMENTS | .................................................................................. | 29 |

A. DRAFT RENEWED TITLE V OPERATING PERMIT
B. PREVIOUS TITLE V OPERATING PERMIT
C. DETAILED FACILITY LIST
D. DISTRICT RULE 4601 STRINGENCY ANALYSIS
E. TABLE OF STANDARDS IN RULE 4601
TITLE V PERMIT RENEWAL EVALUATION
Cogeneration Facility

Engineer: Gurpreet Brar
Date: January 27, 2011

Facility Number: S-511
Facility Name: Sycamore Cogeneration Company
Mailing Address: P.O. Box 80598
Bakersfield, CA 93380

Contact Name: Gaylord Edwards
Phone: (661) 615-4630

Responsible Official: Gaylord Edwards
Title: Executive Director

Project #: S-1082628
Deemed Complete: June 19, 2008

I. PROPOSAL

Sycamore Cogeneration Company was issued a Title V permit on January 25, 2005. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.
II. FACILITY LOCATION

Sycamore is located in the center of the north 1/2 of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, Exemptions (amended December 19, 2002 ⇒ amended December 20, 2007)


- District Rule 4101, Visible Emissions (amended November 15, 2001 ⇒ amended February 17, 2005)
• District Rule 4601, Architectural Coatings  
  (amended October 31, 2001 ⇒ amended December 17, 2009)

• District Rule 4702, Internal Combustion Engines – Phase II  
  (amended June 16, 2005 ⇒ amended January 18, 2007)

• District Rule 4703, Stationary Gas Turbines  
  (amended April 25, 2002 ⇒ amended September 20, 2007)

• District Rule 8011, General Requirements  

• District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities  

• District Rule 8031, Bulk Materials  

• District Rule 8041, Carryout and Trackout  

• District Rule 8051, Open Areas  

• District Rule 8061, Paved and Unpaved Roads  

• District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas  
  (adopted November 15, 2001 ⇒ amended September 16, 2004)

• 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos  
  (amended July 20, 2004)

• 40 CFR Part 82, Subpart B and F, Stratospheric Ozone

• 40 CFR Part 60, Subpart GG, New Source Performance Standards; Standard of Performance for Stationary Gas Turbine
B. Rules Removed

- District Rule 4701, Internal Combustion Engines – Phase 1 (amended August 21, 2003)

Pursuant to Section 7.5.2.3 of District Rule 4702, District Rule 4701 is no longer applicable to such engines that are required to be in full compliance with District Rule 4702. As these engines are in compliance with District Rule 4702, therefore, they are not subject to District Rule 4701.

C. Rules Added

Following rules are that are applicable to operation of this facility has been adopted since issuance of the initial Title V permit.

- 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines


D. Rules Not Updated

- District Rule 1080, Stack Monitoring (amended December 17, 1992)

- District Rule 1081, Source Sampling (amended December 16, 1993)

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

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

- District Rule 2010, Permits Required (amended December 17, 1992)
• 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, *Federally Mandated Operating Permits* (amended June 21, 2001)

• District Rule 4001, *New Source Performance Standards* (amended April 14, 1999)


• District Rule 4201, *Particulate Matter Concentration* (amended December 17, 1992)

• District Rule 4801, *Sulfur Compounds (Non-SIP replacement for Kern County Rule 108.1)* (amended December 17, 1992)

• Kern County Rule 407

• 40 CFR Part 60, Subpart A, *Monitoring Requirements*

• 40 CFR Part 64, *Compliance Assurance Monitoring*

### VII. 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”.

For this facility, the following are not federally enforceable and will not be discussed in further detail:
A. Rules Added

None

Rules Not Updated

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

- Condition 1 on facility wide permit S-511-0-3 assures compliance with the requirements of this rule.

- Condition 5 on the revised permit S-511-7-2 will ensure compliance with the requirements of this section.

VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the initial Title V permit.

A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

B. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.24.1, defined as an action including at least one of the following items:

1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.

2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.

4) Addition of any new emissions unit which is subject to District permitting requirements.

5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable to the permits being renewed as a part of this project.

C. District Rule 2520 - Federally Mandated Operating

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

D. District Rule 4101 - Visible Emissions

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101.

- Condition 23 on facility wide permit S-511-0-3 assures compliance with the requirements of this rule.

E. District Rule 4601 – Architectural Coatings

This rule limits the emissions of VOC's from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). This rule further specifies labeling requirements, coatings thinning recommendations, and storage requirements.
The rule was amended in February 17, 2005 but had not been SIP approved. The stringency analysis in Attachment D shows that the amended rule is as stringent as the SIP approved version of the rule that was adopted in October 31, 2001.

The following changes were included in the latest rule amendment that resulted in revising current permit requirements:

- The tables outlining the VOC content of different specialty coatings has been largely replaced with the Table of Standards in Section 5.0.

- New labeling, reporting, test methodology and other requirements have been incorporated into the rule in order to allow ARB to administer the Averaging Program as detailed in Section 8.0.

- Conditions 24, 25 and 26 of the facility wide requirements S-511-0-3 will assure compliance with the requirements of this rule.

F. District Rule 4702 - Internal Combustion Engines – Phase II

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.

This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.

Pursuant to Section 4.3, except for the requirements of Section 6.2.3, the requirements of this rule shall not apply to an internal combustion engine that meets the following conditions:

1) The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and

2) Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and
3) The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Condition 3 on the revised permit S-511-5-3 will ensure compliance with the requirements of this section.

Section 5.1.2 requires that the owner of an internal combustion engine shall not operate it in such a manner that results in emissions exceeding the limits in the Engine Emission Limits table below:

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>Emission Limit/Standard</th>
<th>Compliance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Certified Compression-Ignited Engine</td>
<td>Meet Certified Compression-Ignited Engine Standard in effect at time of installation</td>
<td>At time of installation</td>
</tr>
<tr>
<td>b. EPA Certified Tier 3 or Tier 4 Engine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 5.2 requires that all continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutive minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. The IC engine involved with this project does not have a CEMS installed; therefore this section of the Rule is not applicable.

Section 5.7.1 requires that the owner of an engine subject to the requirements of Section 5.1 or 4.2 shall comply with the requirements specified in Sections 5.7.2 through 5.7.5.

Section 5.7.2 requires the owner to properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.

Condition 4 on the revised permits S-511-5-3 and S-511-7-2 will ensure compliance with the requirements of this section.

Section 5.7.3 requires the owner to monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.
Condition 4 on the revised permits S-511-5-3 and S-511-7-2 will ensure compliance with the requirements of this section.

Section 5.7.4 requires each engine to install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Stationary Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Condition 2 on the revised permits S-511-5-3 and S-511-7-2 will ensure compliance with the requirements of this section.

Section 5.7.5 is applicable to engines retrofitted with a NO\textsubscript{x} exhaust control. The engine in this project does not have add-on NO\textsubscript{x} controls. Therefore, the requirements of Section 5.7.5 are not applicable.

Section 6.2.1 requires that except for engines subject to Section 4.0, the owner of an engine subject to the requirements of this Section 5.1 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information:

- Total hours of operation,
- Type of fuel used,
- Maintenance or modifications performed,
- Monitoring data,
- Compliance source test results, and
- Any other information necessary to demonstrate compliance with this rule,
- For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis.

Condition 12 on the revised permit S-511-7-2 will ensure compliance with the requirements of this section.

Section 6.2.2 requires that the data collected pursuant to the requirements of Section 5.6 and Section 5.7 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request.
Condition 8 on the revised permit S-511-5-3 will ensure compliance with the requirements of this section.

Condition 13 on the revised permit S-511-7-2 will ensure compliance with the requirements of this section.

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and submitted to the APCO upon request.

6.2.3.1 Total hours of operation,
6.2.3.2 The type of fuel used,
6.2.3.3 The purpose for operating the engine,
6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and
6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.

Condition 6 on the revised permit S-511-5-3 will ensure compliance with the requirements of this section.

Section 6.3 requires that the owner of an engine subject to the requirements of Section 5.1 or the requirements of Section 8.0, shall comply with the requirements of Section 6.3, except for an engine specified in Section 6.3.1.

Section 6.3.1 states Sections 6.3.2 through Section 6.3.4 shall not apply to an engine specified below:

6.3.1.1 A certified compression-ignited engine that has not been retrofitted with an exhaust control and is not subject to the requirements of Section 8.0.

The engine under permit unit S-511-7-2 is a certified compression-ignited engine not retrofitted with exhaust control and is not subject to Section 8.0. Therefore, source testing is not applicable.

Section 6.5 requires that the owner of an engine subject to the requirements of Section 5.1 or the requirements of Section 8.0, except for an engine specified in Section 6.5.1, shall submit to the APCO for approval, an I&M plan that specified all actions to be taken to satisfy the requirements of Section 6.5 and 5.7.
Section 6.5.1 states Sections 6.5.2 through Section 6.5.9 shall not apply to an engine specified below:

6.5.1.1 A certified compression-ignited engine that has not been retrofitted with an exhaust control and is not subject to the requirements of Section 8.0.

The engine under permit unit S-511-7-2 is a certified compression-ignited engine not retrofitted with exhaust control and is not subject to Section 8.0. Therefore, an I&M Plan is not required.

Section 7.3.1.2 requires the owner of an engine that is subject to Section 5.1 and that is required to submit an ATC in order to comply with the requirements of Rule 4702, shall submit such documents 6 months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702.

Both of the engines in this facility meet the requirements of Rule 4702; therefore, no further discussion is required.

G. District Rule 4703 – Stationary Gas Turbines

Section 2.0 of this rule states that the provisions of this rule apply to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0.

All of the District Rule 4703 requirements on the existing permits have been updated in accordance with the latest rule amendments and have been included on the proposed permits S-511-1-14, -2-15, -3-15 & -4-13 as discussed below.

Section 5.1 states that the NOx emissions concentrations measured for compliance with Section 5.0 shall be averaged, using consecutive 15-minute sampling periods, over a three-hour period. NOx emissions concentrations shall be measured in accordance with the applicable test method in Section 6.4 or, if continuous emission monitors are used, all applicable requirements of 40 CFR Part 60 as detailed in Section 6.2. Any variations from these measurement requirements are subject to APCO and EPA approval prior to implementation.

Section 5.1.2, Table 5-2, Tier 2 NOx Compliance Limits, requires the owner or operator to achieve less than or equal to 5 ppmvd NOx @ 15% O2 to meet Tier-2 compliance schedule listed in Section 7.2.
### Tier 2 NO\textsubscript{X} Compliance Limits

<table>
<thead>
<tr>
<th>Turbine Classification Rating</th>
<th>Compliance Option (see Section 7.2)</th>
<th>NO\textsubscript{X} Compliance Limit, ppmvd at 15% O\textsubscript{2}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Gas Fuel</td>
</tr>
<tr>
<td>e) Greater than 10 MW, Simple cycle, and permit condition for greater than 877 hrs/yr operation</td>
<td>Enhanced</td>
<td>3</td>
</tr>
</tbody>
</table>

The turbines in this project are 75 MW with simple cycle; therefore it is subject to limit e) Greater than 10 MW, simple cycle, and permit condition for greater than 877 hrs/yr operation.

Compliance with the emission requirements in section 5.1 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>7, 8, 33 &amp; 46</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>7, 8, 16 &amp; 47</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>9, 10, 18 &amp; 50</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>7, 8, 16, 33 &amp; 46</td>
</tr>
</tbody>
</table>

Section 5.2, Table 5-4, CO Compliance Limits, requires the owner or operator to operate and maintain the gas turbine such that CO emissions must be less than 200 ppmvd @ 15\% O\textsubscript{2}. Rule 4703 does not include a specific averaging period requirement for demonstrating compliance with the CO emission limit. The District practice is to require CO emissions compliance demonstration on 3-hour rolling average period. Compliance with the emission requirements in section 5.2 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>46</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>47</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>50</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>46</td>
</tr>
</tbody>
</table>
Section 5.3 stated that the NOx and CO emission limits of Section 5.1 and Section 5.2 shall not apply during a transitional operation period, which includes bypass transition period, as defined in Section 3.0, provided an operator complies with the applicable requirements specified in Sections 5.3.1 and 5.3.2.

Section 5.3.1 requires the operator to meet the following conditions:

- The duration of each startup or each shutdown shall not exceed two hours.
- For each bypass transition period, the requirements specified in Section 3.2 shall be met.
- For each primary re-ignition period, the requirements specified in Section 3.20 shall be met.
- Each reduced load period shall not exceed one hour.

Section 5.3.2 requires the emission control system to be in operation and emissions shall be minimized insofar as technologically feasible during each transitional operation period.

Compliance with the requirements in section 5.3.1 and 5.3.2 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>49 &amp; 50</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>50 &amp; 51</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>54 &amp; 55</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>49 &amp; 50</td>
</tr>
</tbody>
</table>

Section 6.2.1 requires the owner to operate and maintain continuous emissions monitoring equipment for NOx and oxygen, or install and maintain APCO-approved alternate monitoring. The facility operates continuous emissions monitoring system which continuously measures and records the exhaust gas NOx and oxygen concentrations.

Compliance with the monitoring requirements in section 6.2.1 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
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</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>19</td>
</tr>
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<td>19</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>21</td>
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<tr>
<td>S-511-4-13</td>
<td>19</td>
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</tbody>
</table>
Section 6.2.2 specifies monitoring requirements for turbines without exhaust-gas NO\textsubscript{X} control devices. For turbines without exhaust-gas NO\textsubscript{X} control devices and without continuous emissions monitoring equipment, the owner or operator shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier, and approved by the APCO. The facility operates continuous emissions monitoring system, therefore, this section is not applicable.

Section 6.2.4 requires the facility to maintain all records for a period of five years from the date of data entry and shall make such records available to the APCO upon request.

Compliance with the recordkeeping requirements of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>15</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>15</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>17</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>15</td>
</tr>
</tbody>
</table>

Section 6.2.5 requires that the owner or operator submit to the APCO, before issuance of the Permit to Operate, information correlating the control system operating to the associated measure NO\textsubscript{X} output. Since these units are currently permitted, this information has previously been collected and no further information is needed.

Section 6.2.6 requires the facility to maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, and the type and quantity of fuel used.

Compliance with section 6.2.6 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>17</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>17</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>19</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>17</td>
</tr>
</tbody>
</table>
Section 6.2.8 requires the owners or operators performing startups or shutdowns to keep records of the duration of each startup and shutdown.

Compliance with the requirements of section 6.2.8 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>18</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>18</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>20</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>18</td>
</tr>
</tbody>
</table>

Section 6.3.1 states that the owner or operator of any stationary gas turbine system subject to the provisions of Section 5.0 of this rule shall provide source test information annually regarding the exhaust gas NOx and CO concentrations. The gas turbine is required to be tested annually to ensure compliance with NOx and CO concentrations.

Compliance with the testing requirements in section 6.3.1 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>7</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>7</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>9</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>7</td>
</tr>
</tbody>
</table>

Section 6.3.2 specifies source testing requirements for units operating less than 877 hours per year. The turbine at this facility will be allowed to operate in excess of 877 hours per year. Therefore, the requirements of this section are not applicable and no further discussion is required.

Section 6.3.3 states that units with intermittently operated auxiliary burners shall demonstrate compliance with the auxiliary burner in both "on" and "off" configurations. Therefore, the requirements of this section are not applicable and no further discussion is required.

Section 6.4 states that the facility must demonstrate compliance annually with the NOx and CO emission limits using the following test methods, unless otherwise approved by the APCO and EPA:
- 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.

- Demonstrated percent efficiency of the stationary gas turbine shall be determined using the facility instrumentation for gas turbine fuel consumption and power output.

Compliance with the test measures in section 6.4 of this rule is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>6, 7, 8 &amp; 16</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>6, 7, 8 &amp; 16</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>8, 9, 10 &amp; 18</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>6, 7, 8 &amp; 16</td>
</tr>
</tbody>
</table>

The District has determined that the facility is operating in compliance with the requirements of this rule, therefore, no further discussion is required.

H. District Rule 8011, General Requirements

The purpose of Regulation VIII (Fugitive PM$_{10}$ Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM$_{10}$) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. The Rules contained in this Regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM$_{10}$ Nonattainment Areas. These rules are applicable to specified anthropogenic fugitive dust sources. Fugitive dust contains PM$_{10}$ and particles larger than PM$_{10}$. Controlling fugitive dust missions when visible emissions are detected will not prevent all PM$_{10}$ emissions, but will substantially reduce PM$_{10}$ emissions.
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 PM$_{10}$ Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District.

- Conditions 30 through 35 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

I. **District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities**

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities.

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 landflling activities.

Section 5.0 requires that 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.

- Condition 30 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

J. **District Rule 8031, Bulk Materials**

The purpose of this rule is to limit fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials.

This rule applies to the outdoor handling, storage, and transport of any bulk material.
Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

- Condition 31 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

K. District Rule 8041, Carryout and Trackout

The purpose of this rule is to limit fugitive dust emissions from carryout and trackout.

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.

Section 5.0 requires that an owner/operator shall sufficiently prevent or cleanup carryout and trackout as specified in sections 5.1 through 5.8. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

- Condition 32 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

L. District Rule 8051, Open Areas

The purpose of this rule is to limit fugitive dust emissions from open areas.

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.
Section 5.0 requires that whenever open areas are disturbed or vehicles are used in open areas, the owner/operator shall implement one or a combination of control measures indicated in Table 8051-1 to comply with the conditions of a stabilized surface at all times and 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.

- Condition 33 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

M. District Rule 8061, Paved and Unpaved Roads

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.

This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.

- Condition 34 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.

N. District Rule 8071, Unpaved Vehicle/Equipment Traffic Area

The purpose of this rule is to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas by implementing control measures and design criteria.

This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger.

- Condition 35 of the facility-wide requirements S-511-0-3 will ensure compliance with these requirements.
O. 40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines

This requirement limits emissions of nitrogen oxides. Emissions shall not exceed a NO\textsubscript{x} emission rate of 75 ppmv or 150 ppmv, depending on the unit size (at 15% O\textsubscript{2} with the ISO correction factor). The following analysis shows that the proposed requirement of District Rule 4703 is more stringent than 40 CFR requirements pertaining to NO\textsubscript{x} emissions. Streamlining procedures, as documented in the following steps is utilized to substitute the proposed set of requirements for the otherwise applicable requirements.

The following table has side-by-side comparison of applicable requirements:

<table>
<thead>
<tr>
<th>Type of Requirement</th>
<th>District Rule 4703</th>
<th>Subpart GG, § 60.332, 60.333, 60.334 and 60.335</th>
<th>Proposed Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions Limit</td>
<td>Section 5.1.2 - for &gt; 10 MW, 3 ppmv @ 15% O\textsubscript{2}, (Tier 2 Enhanced Option)</td>
<td>60.332(e)(1) – 75 ppmv @ 15% O\textsubscript{2}. (Lowest possible concentration) 60.333(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis.</td>
<td>3.0 ppmv @ 15% O\textsubscript{2}.</td>
</tr>
<tr>
<td>Work place standards</td>
<td>N/A</td>
<td>60.333(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8% by weight (8000 ppmw).</td>
<td>These units shall be fired natural gas only which has a total sulfur content of less than or equal to 0.3 gr/100 scf</td>
</tr>
<tr>
<td>Type of Requirement</td>
<td>District Rule 4703</td>
<td>Subpart GG, § 60.332, 60.333, 60.334 and 60.335</td>
<td>Proposed Requirement</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Monitoring</td>
<td>(6.2.1) Except for units subject to Section 6.2.3, for turbines with exhaust gas NOx control devices, the owner or operator shall either install, operate, and maintain continuous emissions monitoring equipment for NOx and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring</td>
<td>60.334(b) install, certify, maintain, operate, and quality-assure a continuous emissions monitoring system for NOx and O2. 60.334(c) Any turbine that does not use steam or water injection to control NOx emissions, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of this section. Also, if the owner or operator has previously submitted and received EPA, State, or local permitting authority approval of a procedure for monitoring compliance with the applicable NOx emission limit under §60.332, that approved procedure may continue to be used. 60.334(h)(3) 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) demonstrated by representative fuel sampling data which shows that sulfur content of gas does not exceed 0.20 gr/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D of 40 CFR part 75 is required.</td>
<td>These turbines will use continuous emission monitoring system (CEMS) to measure and record NOx and O2 concentration. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, a transportation contract and have the sulfur content tested to ensure complies with permit limit, unless PUC-regulated natural gas is used.</td>
</tr>
<tr>
<td>Reporting</td>
<td>The owner should operate and maintain continuous emissions monitoring equipment for NOx and oxygen, or install and maintain APCO-approved alternate monitoring. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, and the type and quantity of fuel used. The owner or operator of any stationary gas turbine system shall provide source test information annually regarding the exhaust gas NOx and CO concentrations.</td>
<td>60.334(J) the owner or operator shall submit reports of excess emissions and monitor downtime as required under §60.7(c), periods of excess emissions that shall be reported are defined as follows: 60.334(J)(1)(iii) - An hour of excess emissions shall be any operating hour in which a rolling average NOx concentration exceeds applicable emission limits and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or diluent (or both). 60.334(J)(5): all reports required under §60.7(c) shall be post marked by 30th day following the end of each 6-month period. 60.334(j)(D): If a sulfur content measurement exceeds 0.8 weight percent (8000 ppmw), immediately begin daily monitoring and shall continue until 30 consecutive daily samples, each having a sulfur content no greater than 0.8 weight percent (8000 ppmw), are obtained.</td>
<td>The permittee shall maintain records of (1) the date and time of NOx, CO and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx and CO concentrations corrected to 15% O2, (3) a description of any corrective action taken to maintain the emissions at or below the acceptable levels (4) quarterly report listing of any daily period during which sulfur content of fuel being fired in gas turbine exceeds 0.8% by weight.</td>
</tr>
</tbody>
</table>
The District Rule 4703 requirement to limit NOx concentration to 3 ppmv @ 15% O2 is clearly more stringent than the Subpart GG emissions limit of 75 ppmv. The SOx emissions are limited to be below 150 ppmv which is lower than 8000 ppmv allowed by NSPS Subpart GG.

Compliance with this Subpart is demonstrated with the permit conditions listed in the table below.

<table>
<thead>
<tr>
<th>Permit Unit(s)</th>
<th>Permit Condition(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-511-1-14</td>
<td>4, 5, 7, 8, 9, 17, 19, 25 &amp; 31</td>
</tr>
<tr>
<td>S-511-2-15</td>
<td>4, 5, 7, 8, 9, 17, 19, 26 &amp; 32</td>
</tr>
<tr>
<td>S-511-3-15</td>
<td>6, 7, 9, 10, 11, 19, 28 &amp; 35</td>
</tr>
<tr>
<td>S-511-4-13</td>
<td>4, 5, 7, 8, 9, 17, 19, 25 &amp; 31</td>
</tr>
</tbody>
</table>

P. 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this Subpart was amended September 18, 2003, and condition 36 of S-511-0-3 assures compliance with the requirements.

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


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 source of HAP emissions and is not subject to this subpart.

S. 40 CFR Part 63 Subpart ZZZZ

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§6585(b) states, “A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.”

§6585(c) states, “An area source of HAP emissions is a source that is not a major source.”

The facility is not a major source as defined in §6585(b). Therefore, this facility is an area source of HAP emissions.

§6590(a) states, “An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.”
§6590(a)(1) defines the criteria for an existing stationary RICE as follows:

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

This facility is an area source of HAP emissions. The stationary engine under existing permit S-511-5-2 have commenced construction or reconstruction before June 12, 2006. Therefore, this engine meet the definition of an existing stationary RICE as defined in §6590(a)(1)(iii).

§6590(b)(3) states that the following engines do not have to meet the requirements of this subpart and of subpart A of this part:

- stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source,
- existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE,
- existing spark ignition 4 stroke lean burn (4SLB) stationary RICE,
- existing compression ignition (CI) stationary RICE,
- existing emergency stationary RICE,
- existing limited use stationary RICE, or
- existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis
The engine under existing permit S-511-5-2 is an existing emergency stationary RICE. Therefore, this engine does not have to meet the requirements of this subpart and of subpart A of this part. No further discussion is required.

T. 40 CFR Part 64, Compliance Assurance Monitoring

This regulation requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

1. the unit must have 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 a major source threshold

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Major Source Threshold (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{x}</td>
<td>20,000</td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>140,000</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>140,000</td>
</tr>
<tr>
<td>CO</td>
<td>200,000</td>
</tr>
<tr>
<td>VOC</td>
<td>20,000</td>
</tr>
</tbody>
</table>

S-511-1-14, -2-15, -3-15 & -4-13:

1) This unit contains emission limits for NO\textsubscript{x}, SO\textsubscript{x}, PM\textsubscript{10}, CO, and VOC. This unit has no add-on controls for SO\textsubscript{x}, PM\textsubscript{10} or VOC emissions. Therefore, this unit is not subject to CAM for SO\textsubscript{x}, PM\textsubscript{10} or VOC emissions. Based on 40 CFR 64.2(b)(1)(vi), NO\textsubscript{x} and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NO\textsubscript{x} and CO.

S-511-5-3 & -6-2:

1) These units do not contain emission limits for NO\textsubscript{x}, SO\textsubscript{x}, PM\textsubscript{10}, CO, and VOC. Therefore, these units are not subject to CAM for any pollutant.
S-511-7-2:

1) This unit contains emission limits for NO\textsubscript{X}, SO\textsubscript{X}, PM\textsubscript{10}, CO, and VOC.
2) This unit has no add-on controls; therefore, it is not subject to CAM for any pollutant.

U. 40 CFR Part 82, Subparts B and F, Stratospheric Ozone

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2004 and 2008, and conditions 28 and 29 of S-511-0-3 assure compliance with the requirements.

IX. 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

The applicant is not requesting to use any model general permit templates for this Title V renewal project.

B. Obsolete Permit Shields From Existing Permit Requirements

Condition 2 on the current permits S-511-1-14 & -4-13 has been changed by removing permit shield for District Rule 4703 as it was granted based on the previous amended version of District Rule 4703 which had been superseded by the current version (amended 9/20/07) and also by updating permit shield for 40 CFR Part 60, Subpart GG which had been superseded by the current version with latest amendment done on February 24, 2006.
X. PERMIT CONDITIONS

See Attachment A – Draft Renewed Title V Operating Permits.

XI. ATTACHMENTS

A. Draft Renewed Title V Operating Permits
B. Previous Title V Operating Permits
C. Detailed Facility List
D. District Rule 4601 Stringency Analysis
E. Table of Standards in Rule 4601
FACILITY-WIDE REQUIREMENTS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

2. 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 and Kern County Rule 111] Federally Enforceable Through Title V Permit

3. 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 and Kern County Rule 111] Federally Enforceable Through Title V Permit

4. {4364} 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

5. {4365} 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

6. {4366} 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, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit

7. {4367} 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

8. {4368} 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

9. {4369} 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

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.
10. 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

11. 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

12. 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

13. 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

14. 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

15. 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

16. 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

17. 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

18. 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

19. 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

20. 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

21. 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

22. 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.
23. {4383} 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 (02/17/05). 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

24. {4384} 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 Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 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

25. {4385} All VOC-containing materials 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

26. {4386} 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

27. {4387} 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

28. {4388} 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 Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

29. {4389} 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 Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

30. {4390} 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

31. {4391} 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

32. {4392} 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

33. {4393} 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

34. {4394} 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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and 8011] Federally Enforceable Through Title V Permit
35. (4395) Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. 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 comply with the requirements of Section 5.1.3 of District Rule 8071. 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 shall comply with the requirements of Section 5.1.4 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 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

36. (4396) 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

37. (4397) 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

38. (4398) 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

39. (4399) 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

40. (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

41. (4401) 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 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, 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

43. (2256) Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

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

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the gaseous fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703 (as amended 9/20/07), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a) and Kern County Rule 407] Federally Enforceable Through Title V Permit

10. (2270) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

13. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM’s that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

16. (2272) Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.6; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

18. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit

19. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703, 6.2.1] Federally Enforceable Through Title V Permit

20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

21. (2250) The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

22. (2251) The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

23. (2252) The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

24. (2254) APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
25. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

26. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

27. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rules 1080, 10.0 and 1100, 6.1; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a), and (b); 60.333 (a); 60.334 (b), (c), (h), (i) and (j)(5); and 60.335 (b). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Operators of CEM’s installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [40 CFR 60.334(j)(5); District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

32. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

33. The CGT combusters shall be a dry low NOx design capable of achieving 3 ppm or lower at 15% O2. [District Rule 4703, 5.1.2 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

34. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Federally Enforceable Through Title V Permit

35. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Federally Enforceable Through Title V Permit

36. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit

37. When operating in cogeneration mode, exhaust gas ducting from CGT’s through HRSG’s to the atmosphere shall be gas-tight. [District NSR Rule] Federally Enforceable Through Title V Permit

38. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

40. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Each exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

42. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Federally Enforceable Through Title V Permit

43. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

44. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

45. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

46. Emission rates from CGT, except during startup, shutdown and/or reduced load periods, shall not exceed any of the following: NOx (as NO2) - 3 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703, 5.1.2 & 5.2; and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

47. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

48. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.29 and 3.26] Federally Enforceable Through Title V Permit

49. The duration of each startup or each shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit

50. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

51. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

52. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

53. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

54. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] 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.
55. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

56. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

57. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District’s discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

58. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

59. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

60. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

61. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

62. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

63. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

64. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

66. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

67. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] 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.
68. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-2-15
SECTION: 31  TOWNSHIP: 28S  RANGE: 28E
EXPIRATION DATE: 7/30/2008

EQUIPMENT DESCRIPTION:
75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT
WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH A
BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT
RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #2)

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be
   pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District Rule 2201; Kern
   County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in
   order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable
   Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081]
   Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the
   turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(b)(10)] Federally
   Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in
   accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR
   60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the gaseous fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945.
   [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO
   concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10
   or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust
   gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally
   Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency
   (EFF) as defined in District Rule 4703 (as amended 9/20/07), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District
   Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15
   consecutive minutes. [40 CFR 60.333(a) and Kern County Rule 407] Federally Enforceable Through Title V Permit

10. (2270) All continuous monitoring systems and monitoring devices shall be installed and operational prior to
    conducting performance tests. Verification of operational status shall, as a minimum, include completion of the
    manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40
    CFR 60.13(b)] Federally Enforceable Through Title V Permit

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

Facility Name: Sycamore Cogeneration Co
Location: Heavy Oil Central, CA
S-511-2-15  Jan 27 2011  6:38AM - BRARG
11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

13. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

16. (2272) Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.6; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

18. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit

19. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b), (c) and District Rules 2520, 9.4.2 and 4703, 6.2.1] Federally Enforceable Through Title V Permit

20. When CGT exhausts to bypass stack, the CEM probe located in the transition section shall be used to measure exhaust gas NOx, CO and O2 or CO2 concentration. [District Rule 2201] Federally Enforceable Through Title V Permit

21. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

22. (2250) The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

23. (2251) The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

24. (2252) The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] 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.
25. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

26. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

27. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

28. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the Kern County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a), and (b); 60.333 (a); 60.334 (b), (c), (h), (i), and (j)(5); and 60.335 (b). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [40 CFR 60.334 (j)(5); District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

33. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

34. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

35. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District Rule 2201] Federally Enforceable Through Title V Permit

36. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District Rule 2201] Federally Enforceable Through Title V Permit

37. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

38. When operating in cogeneration mode, exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District Rule 2201] 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.
39. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

40. Each CGT shall have a fuel consumption monitor/recorder. [District Rule 2201 and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

41. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District Rule 2201] Federally Enforceable Through Title V Permit

42. HRSG stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

43. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District Rule 2201] Federally Enforceable Through Title V Permit

44. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

45. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

46. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rules 2201 and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

47. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3.0 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703, 5.1.2 & 5.2 and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

48. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

49. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit’s emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.29 and 3.26] Federally Enforceable Through Title V Permit

50. The duration of each startup or each shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit

51. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

52. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

53. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

54. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit
55. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

56. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

57. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

58. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

59. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

60. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

61. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

62. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

63. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

64. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

66. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

67. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit
68. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-3-15
SECTION: NW30      TOWNSHIP: 28S      RANGE: 28E
EXPIRATION DATE: 11/30/2008

EQUIPMENT DESCRIPTION:
75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT
WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTOR TECHNOLOGY DISCHARGING TO ATMOSPHERE
THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR
HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #3)

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be
pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District Rule 2201; Kern
County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in
order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable
Through Title V Permit

3. Startup shall be defined as the period of time during which the gas turbine is brought from a shutdown status to its
operating temperature and pressure, including the time required by the gas turbine’s emission control system to reach
full operation. [District Rule 4703, 3.29] Federally Enforceable Through Title V Permit

4. Shutdown shall be defined as the period of time during which the gas turbine is taken from an operational to a non-
operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply
to the gas turbine is completely turned off. [District Rule 4703, 3.26] Federally Enforceable Through Title V Permit

5. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081]
Federally Enforceable Through Title V Permit

6. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the
turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(b)(10)] Federally
Enforceable Through Title V Permit

7. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in
accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR
60.334(i)] Federally Enforceable Through Title V Permit

8. The HHV and LHV of the gaseous fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945.
[District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

9. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO
concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10
or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust
gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally
Enforceable Through Title V Permit

10. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency
(EFF) as defined in District Rule 4703 (as amended 9/20/07) 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District
Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
11. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a) and Kern County Rule 407] Federally Enforceable Through Title V Permit

12. (2270) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

13. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

14. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

15. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM’s that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

16. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

18. (2272) Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

19. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.6; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

20. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit

21. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703, 6.2.1] Federally Enforceable Through Title V Permit

22. When CGT exhausts to bypass stack, the CEM probe located in the transition section shall be used to measure exhaust gas NOx, CO and O2 or CO2 concentration. [District Rule 2201] Federally Enforceable Through Title V Permit

23. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

24. (2250) The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

25. (2251) The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.
26. {2252} The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

27. {2254} APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

28. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

29. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

30. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

31. The APCO shall be notified no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rule 407 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a), and (b); 60.333 (a); 60.334 (b), (c), (h), (i) and (j)(5); and 60.335 (b). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

34. {2282} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [40 CFR 60.334 (j)(5); District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

36. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

37. The CGT combusters shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% CO. [District Rule 4703 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

38. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
39. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District Rule 2201] Federally Enforceable Through Title V Permit

40. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

41. When operating in cogeneration mode, exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Each CGT shall have a fuel consumption monitor/recorder. [District Rule 2201 and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

44. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District Rule 2201] Federally Enforceable Through Title V Permit

45. HRSG stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

46. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District Rule 2201] Federally Enforceable Through Title V Permit

47. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

48. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

49. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rules 2201] Federally Enforceable Through Title V Permit

50. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703, 5.1.2 & 5.2] Federally Enforceable Through Title V Permit

51. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1,629.6 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

52. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

53. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

54. The duration of each startup or each shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit

55. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] 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.
56. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

57. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

58. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

59. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

60. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

61. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

62. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

63. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

64. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

65. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

66. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

67. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

68. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit
70. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

75. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(c). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

76. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

77. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

78. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit

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

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight) [District NSR Rule; Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in accordance with the requirements of 40 CFR 60.334(h) and 40 CFR 60.334(i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the gaseous fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703 (as amended 9/20/07), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a) and Kern County Rule 407] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
10. (2270) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

13. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

15. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

16. (2272) Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.6; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

18. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703, 6.2.8] Federally Enforceable Through Title V Permit

19. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration . [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703, 6.2.1] Federally Enforceable Through Title V Permit

20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

21. (2250) The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

22. (2251) The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
23. (2252) The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

24. (2254) APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

25. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

26. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

27. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the Kern County Rule 407 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a), and (b); 60.333 (a); 60.334 (b), (c), (h), (i) and (j)(5); and 60.335 (b). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30. (2282) Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [40 CFR 60.334 (j)(5); District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

32. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

33. The CGT combustors shall be a dry low NOx design capable of achieving 3 ppm or lower at 15% O2. [District Rule 4703, 5.1.2 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

34. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Federally Enforceable Through Title V Permit

35. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Federally Enforceable Through Title V Permit
36. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

37. When operating in cogeneration mode, exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District NSR Rule] Federally Enforceable Through Title V Permit

38. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit

39. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

40. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Each exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

42. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Federally Enforceable Through Title V Permit

43. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

44. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

45. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

46. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3 ppmv @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmv @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703, 5.1.2 and 5.2; and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

47. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

48. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.29 and 3.26] Federally Enforceable Through Title V Permit

49. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit

50. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

51. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

52. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] 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.
53. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

54. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

55. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

56. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

57. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

58. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

59. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

60. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

61. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

62. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

63. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

64. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] 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.
66. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

67. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

68. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GC of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8(b) and (c)] Federally Enforceable Through Title V Permit

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

1. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO alternative. [District Rule 4702, 5.7.4] Federally Enforceable Through Title V Permit

3. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702, 4.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

4. Permittee shall properly operate and maintain engine and monitor the operational characteristics of the engine recommended by the engine manufacturer. [District Rule 4702, 5.7.2 and 5.7.3] Federally Enforceable Through Title V Permit

5. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702, 3.15] Federally Enforceable Through Title V Permit

6. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702, 6.2.3 and 17 CCR 93115] Federally Enforceable Through Title V Permit

7. The operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

8. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702, 6.2.2] Federally Enforceable Through Title V Permit

Those terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-6-2
SECTION: 32 TOWNSHIP: 28S RANGE: 28E
EXPIRATION DATE: 11/30/2008
EQUIPMENT DESCRIPTION:
CONFINED ABRASIVE BLASTING OPERATION (ABRASIVE BLASTING CABINET) WITH 100 LB CLEMCO INDUSTRIES (SILVERADO) BLASTING POT SERVED BY A DUST COLLECTOR

PERMIT UNIT REQUIREMENTS

1. The abrasive blasting shall be carried out in a manner to prevent any nuisances. [District Rule 4202]

2. Abrasive blasting operations conducted within the blasting cabinet / room shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity. [92200 CCR]

3. All abrasive blasting shall be conducted in accordance with California Code of Regulations Title 17, Subchapter 6, Sections 92000 through 92540. [CCR]
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-7-2
SECTION: NE31  TOWNSHIP: 28S  RANGE: 28E
EXPIRATION DATE: 1/30/2008
DRAFT

EQUIPMENT DESCRIPTION:
TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Permittee shall provide written notification to the District within 48 hours of operating an IC engine under this permit (if unit is located onsite longer than 24 hours). Such notification shall include the date the engine was brought onsite, the manufacturer, model number, maximum rated horsepower, and emissions information that documents that the engine meets the emission limits and requirements specified in the permit. [District Rule 1070] Federally Enforceable Through Title V Permit

2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO-approved alternative. [District Rules 2201 and 4702, 5.7.4] Federally Enforceable Through Title V Permit

3. The engine shall not operate unless all four GTEs (S-511-1, -2, -3, -4) are shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

4. Permittee shall properly operate and maintain engine and monitor the operational characteristics of the engine as recommended by the engine manufacturer. [District Rule 4702, 5.7.2 and 5.7.3] Federally Enforceable Through Title V Permit

5. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

6. Operation of IC engine shall not exceed 200 hours/yr without prior District approval through issuance of an Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit

7. NOx emissions (referred as NO2) shall not exceed 2.3 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit

8. VOC emissions (referred as methane) shall not exceed 0.16 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit

9. CO emissions shall not exceed 0.6 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit

10. The PM10 emissions rate from the engine shall not exceed 0.12 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

11. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

12. The operator shall maintain records of the type of fuel used and cumulative hours of operation on a 12 month rolling average. These records shall be updated at least monthly. [District Rules 2201 and 4702, 6.2.1] Federally Enforceable Through Title V Permit

13. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070 and 4702, 6.2.2] Federally Enforceable Through Title V Permit

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

Previous Title V Operating Permits
San Joaquin Valley
Air Pollution Control District

FACILITY: S-511-0-2
EXPIRATION DATE: 11/30/2008

FACILITY-WIDE REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

2. 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

3. 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

4. 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

5. 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 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit

6. 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

7. 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

8. 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

9. 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

10. 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

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: SYCAMORE COGENERATION CO
Location: HEAVY OIL CENTRAL, CA
S-511-0-2: 26/7/2011 4:47 AM - BRARG
11. 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

12. 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

13. 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

14. 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

15. 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

16. 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

17. 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

18. 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

19. 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

20. 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

21. 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

22. 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

23. 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 (11/15/01). 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
24. 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 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

25. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. If the permittee performs service on motor vehicles when this service involves the ozonedepleting 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

30. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

31. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

32. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

33. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

34. Any paved or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

35. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

36. 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
37. 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

38. 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

39. 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

40. 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

41. 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 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, 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.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-1-13

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in accordance with the requirements of 40 CFR 60.334(h) and 40 CFR 60.334(i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703 (as amended 4/25/02), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

10. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] 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.
11. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

12. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(a)] Federally Enforceable Through Title V Permit

13. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

15. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

18. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

19. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Federally Enforceable Through Title V Permit

20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

21. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

22. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

23. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] 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.
24. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

25. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

26. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

27. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rules 1080, 10.0 and 1100, 6.1; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) 60.333 (a) and (b); 60.334 (a), (b), (c), (h) and (j)(2), (j)(5) and 60.335(a) and (b); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.3.5(a through e)] Federally Enforceable Through Title V Permit

32. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceed the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.3.5(a through e)] Federally Enforceable Through Title V Permit

33. The CGT combustors shall be a dry low NOx design capable of achieving 3 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

34. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Federally Enforceable Through Title V Permit

35. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Federally Enforceable Through Title V Permit

36. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit
37. When operating in cogeneration mode, exhaust gas ducting from CGT’s through HRSG’s to the atmosphere shall be gas-tight. [District NSR Rule] Federally Enforceable Through Title V Permit

38. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit

39. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

40. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Federally Enforceable Through Title V Permit

41. Each exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

42. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Federally Enforceable Through Title V Permit

43. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

44. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

45. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

46. Emission rates from CGT, except during startup, shutdown and/or reduced load periods, shall not exceed any of the following: NOx (as NO2) - 3 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703; and PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

47. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

48. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703, 3.29 and 3.26] Federally Enforceable Through Title V Permit

49. The duration of each startup or shut down time shall not exceed two hours. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit

50. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit

51. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

52. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] Federally Enforceable Through Title V Permit

53. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] 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.
54. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

55. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

56. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

57. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

58. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

59. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

60. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

61. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

62. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

63. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

64. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

66. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] 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.

Facility Name: SYCAMORE COGENERATION CO
Location: HEAVY OIL CENTRAL, CA
S-511-1-13 : Jan 27 2011 8:47AM – BRARG
67. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

68. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-2-14
EXPIRATION DATE: 11/30/2008
SECTION: 31  TOWNSHIP: 28S  RANGE: 28E

EQUIPMENT DESCRIPTION:
75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #2)

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District Rule 2201; Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3246, D 4468 or D 6667. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703 (as amended 4/25/02), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

10. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus]) 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.
11. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

12. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

13. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

15. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

18. The owner or operator shall not operate the gas turbine after April 30, 2008, or within 90 days following a Major Overhaul if the overhaul occurs after April 30, 2004, under load conditions, excluding the thermal stabilization period or reduced load period, which results in the measured NOx emissions concentration exceeding 3 ppmv @ 15% O2. [District Rule 4703, 5.1.2.1] Federally Enforceable Through Title V Permit

19. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

20. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Federally Enforceable Through Title V Permit

21. When CGT exhausts to bypass stack, the CEM probe located in the transition section shall be used to measure exhaust gas NOx, CO and O2 or CO2 concentration. [District Rule 2201] Federally Enforceable Through Title V Permit

22. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

23. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

24. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] 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.
25. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

26. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

27. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

28. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

29. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) 60.333 (a) and (b); 60.334 (a), (b), (c), (h) and (j)(2), (j)(5) and 60.335(a) and (b); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

33. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

34. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

35. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

36. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District Rule 2201] 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.
37. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District Rule 2201] Federally Enforceable Through Title V Permit

38. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

39. When operating in cogeneration mode, exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District Rule 2201] Federally Enforceable Through Title V Permit

40. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

41. Each CGT shall have a fuel consumption monitor/recorder. [District Rule 2201 and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

42. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District Rule 2201] Federally Enforceable Through Title V Permit

43. HRSG stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

44. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District Rule 2201] Federally Enforceable Through Title V Permit

45. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

46. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

47. Until April 30, 2008, emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1629.6 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

48. Until April 30, 2008, emission rates from CGT, except during startup, shutdown and/or transitional period, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

49. After April 30, 2008, emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rules 2201 and 4703 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

50. After April 30, 2008, emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3.0 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

51. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

52. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

53. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] 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.
54. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

55. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

56. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

57. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

58. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

59. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

60. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

61. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

62. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

63. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

64. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

66. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

67. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Federally Enforceable Through Title V Permit
68. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and G of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

75. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (e)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-3-14
EXPIRATION DATE: 11/30/2008
SECTION: NW30    TOWNSHIP: 28S    RANGE: 28E

EQUIPMENT DESCRIPTION:
75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTOR TECHNOLOGY DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #3)

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 sef or less (0.001% sulfur by weight). [District Rule 2201; Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit

3. Startup shall be defined as the period of time during which the gas turbine is brought from a shutdown status to its operating temperature and pressure, including the time required by the gas turbine's emission control system to reach full operation. [District Rule 4703, 3.29] Federally Enforceable Through Title V Permit

4. Shutdown shall be defined as the period of time during which the gas turbine is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the gas turbine is completely turned off. [District Rule 4703, 3.26] Federally Enforceable Through Title V Permit

5. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081] Federally Enforceable Through Title V Permit

6. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit

7. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

8. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit

9. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit

10. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703 (as amended 4/25/02), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District Rule 4703, 5.1.1 and 6.4.6] 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.
11. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

12. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit

13. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

14. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

15. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

16. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

17. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

19. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

20. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

21. Operator shall operate and maintain in calibration a system which continuously measures and records the following: control system operating parameters, elapsed time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Federally Enforceable Through Title V Permit

22. When GT exhausts to bypass stack, the CEM probe located in the transition section shall be used to measure exhaust gas NOx, CO and O2 or CO2 concentration. [District Rule 2201] Federally Enforceable Through Title V Permit

23. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

24. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] 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.
25. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

26. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

27. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

28. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

29. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

30. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit

31. The APCO shall be notified no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

32. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

33. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) 60.333 (a) and (b); 60.334 (a), (b), (c), (h) and (j)(2), (j)(5) and 60.335(a) and (b); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

35. Operators of CEMs installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

36. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Those terms and conditions are part of the Facility-wide Permit to Operate.
37. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X:B] Federally Enforceable Through Title V Permit

38. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District Rule 2201] Federally Enforceable Through Title V Permit

39. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District Rule 2201] Federally Enforceable Through Title V Permit

40. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

41. When operating in cogeneration mode, exhaust gas ducting from CGT’s through HRSG’s to the atmosphere shall be gas-tight. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

43. Each CGT shall have a fuel consumption monitor/recorder. [District Rule 2201 and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

44. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District Rule 2201] Federally Enforceable Through Title V Permit

45. HRSG stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

46. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District Rule 2201] Federally Enforceable Through Title V Permit

47. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

48. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

49. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

50. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

51. Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1,629.6 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

52. Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [PSD SJ 85-09, X.E] Federally Enforceable Through Title V Permit

53. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] 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.
54. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

55. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] Federally Enforceable Through Title V Permit

56. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

57. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

58. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

59. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

60. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

61. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

62. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

63. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

64. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

65. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

66. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

67. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] 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.
68. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resulting emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(c). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

75. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

76. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

77. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-4-14  EXPIRATION DATE: 11/30/2008
SECTION: NW30   TOWNSHIP: 28S  RANGE: 28E

EQUIPMENT DESCRIPTION:
75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT
WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTORS AND INDIVIDUAL NOX, CO AND DILUENT (CO2 OR O2)
CEMS ANALYZERS DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE
CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED
IN COGENERATION MODE (SYCAMORE UNIT #4)

PERMIT UNIT REQUIREMENTS

1. CGT shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be
pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; Kern
County Rule 407] Federally Enforceable Through Title V Permit

2. Reduced Load Period shall be defined as the time during which a gas turbine is operated at less than rated capacity in
order to change the exhaust gas diverter gate not exceeding one hour. [District Rule 4703, 3.19] Federally Enforceable
Through Title V Permit

3. Operator shall conform with the compliance testing procedures described in District Rule 1081. [District Rule 1081]
Federally Enforceable Through Title V Permit

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the
turbine shall be determined using ASTM method D 1072, D 3246, D4468 or D6667. [40 CFR 60.335(d)] Federally
Enforceable Through Title V Permit

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested in
accordance with the requirements of 40 CFR 60.334 (h) and 40 CFR 60.334(i). [40 CFR 60.334 (h) and 40 CFR
60.334(i)] Federally Enforceable Through Title V Permit

6. The HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule
4703. 6.4.5] Federally Enforceable Through Title V Permit

7. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO
concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10
or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust
gas. [40 CFR 60.8(a), 40 CFR 60.335(b) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally
Enforceable Through Title V Permit

8. The owner or operator shall provide source test information annually regarding the demonstrated percent efficiency
(EFF) as defined in District Rule 4703 (as amended 4/25/02), 5.1.1 and 6.4.6. [40 CFR 60.332(a) and (b) and District
Rule 4703, 5.1.1 and 6.4.6] Federally Enforceable Through Title V Permit

9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally
Enforceable Through Title V Permit

10. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15
consecutive minutes. [40 CFR 60.333(a); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San
Joaquin, Tulare, Kern, and Stanislaus)] 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.
11. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit

12. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Federally Enforceable Through Title V Permit

13. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2] Federally Enforceable Through Title V Permit

14. Records shall be maintained and shall contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [District Rule 1080, 7.3 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

15. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

16. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

17. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit

18. The owner or operator shall not operate the gas turbine after April 30, 2008, or within 90 days following a Major Overhaul if the overhaul occurs after April 30, 2004, under load conditions, excluding the transitional operation period or reduced load period, which results in the measured NOx emissions concentration exceeding 3 ppmv @ 15% O2. [District Rule 4703, 5.1.2.1] Federally Enforceable Through Title V Permit

19. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the following: the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

20. Operator shall operate and maintain in calibration a system which continuously measures and records the following; control system operating parameters, elapse time of operation, the exhaust gas NOx and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Federally Enforceable Through Title V Permit

21. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

22. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit

23. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
24. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d) and District Rule 1080, 7.0] Federally Enforceable Through Title V Permit

25. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

26. Operator shall submit a quarterly report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

27. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit

28. The APCO shall be notified no later than one hour after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

29. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2) 60.333 (a) and (b); 60.334 (a), (b), (c), (h) and (j)(2), (j)(5) and 60.335(a) and (b); District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

31. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

32. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include the following: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventative measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

33. The written report for each calendar quarter shall also include the following: C. 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; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Federally Enforceable Through Title V Permit

34. The CGT combustors shall be a dry low NOx design capable of achieving 3 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Federally Enforceable Through Title V Permit

35. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] 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.
36. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Federally Enforceable Through Title V Permit

37. CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Federally Enforceable Through Title V Permit

38. When operating in cogeneration mode, exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District NSR Rule] Federally Enforceable Through Title V Permit

39. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District NSR Rule] Federally Enforceable Through Title V Permit

40. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Federally Enforceable Through Title V Permit

41. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Federally Enforceable Through Title V Permit

42. Each exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Federally Enforceable Through Title V Permit

43. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Federally Enforceable Through Title V Permit

44. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Federally Enforceable Through Title V Permit

45. Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 2.5 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

46. Until April 30, 2008, emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1629.6 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

47. Until April 30, 2008, emission rates from CGT, except during startup, shutdown and/or transitional period, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

48. After April 30, 2008, emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 552.8 lb/day, VOC - 60.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

49. After April 30, 2008, emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 3 ppmvd @ 15% O2, 12.4 lb/hr on a 3-hr avg, or CO - 25 ppmvd @ 15% O2, 44.0 lb/hr on a 3-hr avg. [District Rule 2201 and PSD SJ 85-09, X.E.] Federally Enforceable Through Title V Permit

50. During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Federally Enforceable Through Title V Permit

51. Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Federally Enforceable Through Title V Permit

52. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] 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.
53. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Federally Enforceable Through Title V Permit

54. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Federally Enforceable Through Title V Permit

55. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Federally Enforceable Through Title V Permit

56. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Federally Enforceable Through Title V Permit

57. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Federally Enforceable Through Title V Permit

58. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

59. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Federally Enforceable Through Title V Permit

60. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Federally Enforceable Through Title V Permit

61. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Federally Enforceable Through Title V Permit

62. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Federally Enforceable Through Title V Permit

63. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

64. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

65. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law, or regulations which such malfunction may cause. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

66. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] 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.
67. At such times as specified by the USEPA, perquisite shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gases and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from perquisite, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

68. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

69. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

70. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

71. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Federally Enforceable Through Title V Permit

72. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

73. All correspondence as required by this permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; c) Director, SJVUAPCD, 1990 East Gettysburg, Fresno, CA, 93726-0244; and d) the California Energy Commission, 1516 Ninth Street, Sacramento, CA, 95814-5512. [PSD SJ 85-09] Federally Enforceable Through Title V Permit

74. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-5-2
SECTION: 30  TOWNSHIP: 28S  RANGE: 28E
EXPIRATION DATE: 11/30/2008
EQUIPMENT DESCRIPTION:
250 HP CUMMINS DIESEL I.C. ENGINE FOR 1500 GPM FIREFRATER PUMP

PERMIT UNIT REQUIREMENTS

1. Sulfur compound emissions, as SO2, shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

2. Particulate matter emissions shall not exceed in concentration at the point of discharge 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit

3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [District Rule 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit

4. The operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

5. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

6. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 hours per year. [District Rule 2520, 9.4.2 and District Rule 4701, 6.2.1] Federally Enforceable Through Title V Permit

7. The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 1070, District Rule 2520, 9.4.2 and District Rule 4701, 6.2.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-6-1
EXPIRATION DATE: 11/30/2008
SECTION: 32  TOWNSHIP: 28S  RANGE: 28E

EQUIPMENT DESCRIPTION:
CONFINED ABRASIVE BLASTING OPERATION (ABRASIVE BLASTING CABINET) WITH 100 LB CLEMCO INDUSTRIES (SILVERADO) BLASTING POT SERVED BY A DUST COLLECTOR

PERMIT UNIT REQUIREMENTS

1. The abrasive blasting shall be carried out in a manner to prevent any nuisances. [District Rule 4202]

2. Abrasive blasting operations conducted within the blasting cabinet / room shall not discharge air contaminants into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than Ringelmann 1 or equivalent to 20% opacity. [92200 CCR]

3. All abrasive blasting shall be conducted in accordance with California Code of Regulations Title 17, Subchapter 6, Sections 92000 through 92540. [CCR]

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

Facility Name: SYCAMORE COGENERATION CO
Location: HEAVY OIL CENTRAL, CA
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-511-7-1
EXPIRATION DATE: 11/30/2008

SECTION: NE31  TOWNSHIP: 28S  RANGE: 28E

EQUIPMENT DESCRIPTION:
TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Permittee shall provide written notification to the District within 48 hours of operating an IC engine under this permit (if unit is located onsite longer than 24 hours). Such notification shall include the date the engine was brought onsite, the manufacturer, model number, maximum rated horsepower, and emissions information that documents that the engine meets the emission limits and requirements specified in the permit. [District Rule 1070] Federally Enforceable Through Title V Permit

2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

3. 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] Federally Enforceable Through Title V Permit

4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO-approved alternative. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

6. This nonroad transportable engine shall not be operated at one location for more than 12 consecutive months and shall meet all the requirements of a nonroad transportable engine, per CFR Title 40 Part 89. [CCR, Title 17 and District Rule 4701] Federally Enforceable Through Title V Permit

7. The engine shall not operate unless all four GTEs (S-511-1, -2, -3, -4) are shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Permittee shall properly operate and maintain engine and monitor the operational characteristics of the engine as recommended by the engine manufacturer. [District Rule 4702] Federally Enforceable Through Title V Permit

9. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]

10. Operation of IC engine shall not exceed 200 hours/yr without prior District approval through issuance of an Authority to Construct. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

11. NOx emissions (referred as NO2) shall not exceed 2.3 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit

12. VOC emissions (referred as methane) shall not exceed 0.16 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit

13. CO emissions shall not exceed 0.6 g/bhp-hr. [District Rule 2201] 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.
14. The PM10 emissions rate from the engine shall not exceed 0.12 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

15. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit

16. The operator shall maintain records of the cumulative hours of operation on a 12 month rolling average. These records shall be updated at least monthly. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

17. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Detailed Facility List
<table>
<thead>
<tr>
<th>PERMIT NUMBER</th>
<th>FEE DESCRIPTION</th>
<th>FEE RULE</th>
<th>QTY</th>
<th>FEE AMOUNT</th>
<th>FEE TOTAL</th>
<th>PERMIT STATUS</th>
<th>EQUIPMENT DESCRIPTION</th>
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</thead>
<tbody>
<tr>
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<td>75 MW</td>
<td>3020-08A G</td>
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<td>10,215.00</td>
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<td>75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTOR TECHNOLOGY DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #3)</td>
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<td>10,215.00</td>
<td>A</td>
<td>75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH GE ENHANCED DRY LOW NOX DLN1+ COMBUSTORS AND INDIVIDUAL NOX, CO AND DILUENT (CO2 OR O2) CEMS ANALYZERS DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #4)</td>
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<tr>
<td>S-511-7-1</td>
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<td>3020-10 D</td>
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<td>479.00</td>
<td>479.00</td>
<td>A</td>
<td>TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED I.C ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR</td>
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</table>

Number of Facilities Reported: 1
ATTACHMENT D

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

<table>
<thead>
<tr>
<th>Requirement Category</th>
<th>SIP Version of Rule 4601 (10/31/01)</th>
<th>Non-SIP Version of Rule 4601 (12/17/09)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 Applicability</td>
<td>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.</td>
<td>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.</td>
<td>No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.</td>
</tr>
<tr>
<td>4.0 Exemptions</td>
<td>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.</td>
<td>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.</td>
<td>The only change is to require reporting the 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.</td>
</tr>
<tr>
<td>5.0 Requirements</td>
<td>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 F. 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.</td>
<td>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.</td>
<td>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.</td>
</tr>
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<td>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</td>
<td>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</td>
<td>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.</td>
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<tr>
<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
<td>Conclusion</td>
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<td>lacquer sanding sealers)</td>
<td>in more than one of the specialty</td>
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<td>5.2.2 Metallic pigmented coatings</td>
<td>coating categories listed in the</td>
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<td>5.2.3 Shellacs</td>
<td>Table of Standards 1, the most</td>
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<td>5.2.4 Fire-retardant coatings</td>
<td>restrictive (or lowest) VOC content</td>
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<td>5.2.5 Pretreatment wash primers</td>
<td>limit shall apply.</td>
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<td>5.2.6 Industrial maintenance coatings</td>
<td>5.2.2 Effective on and after January 1,</td>
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<td>5.2.7 Low-solids coatings</td>
<td>2011, with the exception of the</td>
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<td>5.2.8 Wood preservatives</td>
<td>specialty coating categories</td>
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<td>5.2.9 High temperature coatings</td>
<td>specified in Sections 5.2.3.2,</td>
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<td></td>
<td>5.2.10 Temperature-indicator safety</td>
<td>5.2.3.3, 5.2.3.5 through 5.2.3.9,</td>
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<td>coatings</td>
<td>and 5.2.3.14 through 5.2.3.18, if a</td>
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<td>5.2.11 Antenna coatings</td>
<td>coating is recommended for use in</td>
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<td>5.2.12 Antifouling coatings</td>
<td>more than one of the specialty</td>
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<td>5.2.13 Flow coatings</td>
<td>coating categories listed in the</td>
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<td>5.2.14 Bituminous roof primers</td>
<td>Table of Standards 2, the most</td>
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<td>5.2.15 Specialty primers, sealers and</td>
<td>restrictive (or lowest) VOC content</td>
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<td>undercoaters</td>
<td>limit shall apply.</td>
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<td>5.2.3 This requirement applies to:</td>
<td>5.2.3.1 Lacquer coatings</td>
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<td>usage recommendations that appear</td>
<td>(including lacquer sanding sealers)</td>
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<td>anywhere on the coating container,</td>
<td>5.2.3.2 Metallic pigmented</td>
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<td>anywhere on any label or sticker</td>
<td>coatings</td>
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<td>affixed to the container, or in any</td>
<td>5.2.3.3 Shellacs</td>
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<td>sales, advertising, or technical</td>
<td>5.2.3.4 Fire-retardant coatings</td>
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<td>literature supplied by a</td>
<td>5.2.3.5 Pretreatment wash primers</td>
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<td>manufacturer or anyone acting on</td>
<td>5.2.3.6 Industrial maintenance</td>
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<td>their behalf.</td>
<td>coatings</td>
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<td>5.2.3.7 Low-solids coatings</td>
<td>5.2.3.8 Wood preservatives</td>
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<td>5.2.3.9 High temperature coatings</td>
<td>5.2.3.10 Temperature-indicator safety</td>
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<td>5.2.3.11 Antenna coatings</td>
<td>5.2.3.12 Antifouling coatings</td>
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<td>5.2.3.13 Flow coatings</td>
<td>5.2.3.14 Bituminous roof primers</td>
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<td>5.2.3.15 Specialty primers, sealers and</td>
<td>5.2.3.16 Aluminum roof coatings</td>
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<td></td>
<td>undercoaters</td>
<td>5.2.3.17 Zinc-rich primers</td>
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<td>5.2.3.18 Wood Coatings</td>
<td>5.2.3.18 Wood Coatings</td>
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</tbody>
</table>

5.3 Sell-Through of Coatings:

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.

5.3 Sell-Through of Coatings:

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 may be applied at any time.

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.
<table>
<thead>
<tr>
<th>Requirement Category</th>
<th>SIP Version of Rule 4601 (10/31/01)</th>
<th>Non-SIP Version of Rule 4601 (12/17/09)</th>
<th>Conclusion</th>
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<td>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.</td>
<td>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.</td>
<td>than the SIP version of the rule.</td>
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<tr>
<td>5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the 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.</td>
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<td>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.</td>
<td>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.</td>
<td>No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.</td>
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<td>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.</td>
<td>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.</td>
<td>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.</td>
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<td>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.</td>
<td>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.</td>
<td>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.</td>
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<td>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</td>
<td>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</td>
<td>The VOC limit of the non-SIP version is at least as stringent as the SIP version.</td>
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<td>Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of</td>
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<td>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</td>
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<td>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</td>
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<td>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</td>
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<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
<td>Conclusion</td>
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<tr>
<td>6.0 Administrative Requirements</td>
<td>6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.</td>
<td>6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the 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.</td>
<td>The non-SIP approved rule contains sections listed in the SIP rule plus additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.</td>
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<td>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.</td>
<td>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.</td>
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<td>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.</td>
<td>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.</td>
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<td>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 6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content.</td>
<td>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: 6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or 6.1.3.2 VOC Content, as determined from actual formulation data; or 6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2. If the manufacturer does not</td>
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<td>6.1.4 Industrial Maintenance Coatings: In Table of Standards 2 (Effective on and after 1/1/11) (See Attachment F for Table)</td>
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<td>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.</td>
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<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
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<td>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. 6.1.4.1 &quot;For industrial use only&quot; 6.1.4.2 &quot;For professional use only&quot; 6.1.4.3 &quot;Not for residential use&quot; or &quot;Not intended for residential use&quot; 6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements &quot;For brush application only,&quot; and &quot;This product must not be thinned or sprayed.&quot; 6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement &quot;For Metal Substrates Only&quot; 6.1.7 Specialty Primers, Sealers and Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5. 6.1.7.1 For blocking stains. 6.1.7.2 For fire-damaged substrates. 6.1.7.3 For smoke-damaged substrates. 6.1.7.4 For water-damaged substrates. 6.1.7.5 For excessively chalky substrates. 6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words &quot;Quick Dry&quot; and the dry hard time. 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 &quot;High Gloss.&quot;</td>
<td>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. 6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement &quot;This product can only be sold or used as part of a Faux Finishing coating system&quot;. 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 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. 6.1.5.1 &quot;For industrial use only&quot; 6.1.5.2 &quot;For professional use only&quot; 6.1.5.3 &quot;Not for residential use&quot; or &quot;Not intended for residential use&quot; 6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements &quot;For brush application only,&quot; and &quot;This product must not be thinned or sprayed.&quot; (Category deleted effective January 1, 2011.) 6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement &quot;For Metal Substrates Only&quot;. 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</td>
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<td>Requirement Category</td>
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<td>1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective. 6.1.8.1 For fire-damaged substrates. 6.1.8.2 For smoke-damaged substrates. 6.1.8.3 For water-damaged substrates. 6.1.8.4 For excessively chalky substrates. 6.1.8.5 For blocking stains 6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words &quot;Quick Dry&quot; and the dry hard time. (Category deleted effective January 1, 2011.) 6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement &quot;Reactive Penetrating Sealer.&quot; 6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement &quot;Stone Consolidant - For Professional Use Only.&quot; 6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss coatings shall prominently display the words &quot;High Gloss.&quot; 6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement &quot;For Wood Substrates Only.&quot; 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. 6.1.14.1 &quot;For industrial use only&quot; 6.1.14.2 &quot;For professional use only&quot; 6.1.14.3 &quot;Not for residential use&quot; or &quot;Not intended for residential use&quot;</td>
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<td>6.2 Reporting Requirements</td>
<td>6.2 Reporting Requirements</td>
<td>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</td>
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<td>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. 6.2.2 Rust Preventative Coatings: Each</td>
<td>The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010. 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</td>
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<td>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.</td>
<td>sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.</td>
<td>version.</td>
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<tr>
<td>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.</td>
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<td>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: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions; 6.2.4.2 the product category listed in the Table of Standards to which the coating belongs; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</td>
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<td>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.</td>
<td>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</td>
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<td>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 in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of bituminous 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.</td>
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<tr>
<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
<td>Conclusion</td>
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<td>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.</td>
<td>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.</td>
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</table>

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.

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, 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:

6.2.7.1 the name and mailing address of the manufacturer;
6.2.7.2 the name, address and telephone number of a contact person;
6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category;
6.2.7.4 whether the product is marketed for interior or exterior use or both;
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
<table>
<thead>
<tr>
<th>Requirement Category</th>
<th>SIP Version of Rule 4601 (10/31/01)</th>
<th>Non-SIP Version of Rule 4601 (12/17/09)</th>
<th>Conclusion</th>
</tr>
</thead>
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<tr>
<td></td>
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<td>than one liter (1.057 quart);</td>
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<td>6.2.7.6 the VOC Actual content and</td>
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<td></td>
<td>VOC Regulatory content in grams per</td>
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<td>liter. If thinning is recommended,</td>
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<td>list the VOC Actual content and VOC</td>
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<td>Regulatory content after maximum</td>
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<td>recommended thinning. If containers</td>
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<td>less than one liter have a different</td>
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<td>VOC content than containers</td>
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<td>greater than one liter, list</td>
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<td>separately. If the coating is a</td>
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<td></td>
<td>multi-component product,</td>
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<td></td>
<td>provide the VOC content as mixed or</td>
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<td></td>
<td>catalyzed;</td>
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<td></td>
<td>6.2.7.7 the names and CAS numbers of</td>
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<td></td>
<td>the VOC constituents in the product;</td>
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<td></td>
<td>6.2.7.8 the names and CAS numbers of</td>
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<td>any compounds in the product</td>
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<td>specifically exempted from the VOC</td>
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<td></td>
<td>definition;</td>
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<td>6.2.7.9 whether the product</td>
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<td></td>
<td>is marketed as solvent-borne, water-</td>
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<td>borne, or 100% solids;</td>
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<td>6.2.7.10 description of resin or</td>
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<td>binder in the product;</td>
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<td>6.2.7.11 whether the coating is a</td>
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<td>single-component or multi-</td>
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<tr>
<td></td>
<td>component product;</td>
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<td>6.2.7.12 the density of the product</td>
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<tr>
<td></td>
<td>in pounds per gallon;</td>
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<td>6.2.7.13 the percent by weight of:</td>
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<td>solids, all volatile materials, water,</td>
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<td>and any compounds in the product</td>
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<td>specifically exempted from the VOC</td>
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<td>definition; and</td>
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<td>6.2.7.14 the percent by volume of:</td>
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<td>solids, water, and any compounds in</td>
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<td>the product specifically exempted</td>
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<td></td>
<td>from the VOC definition.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>6.3 Test Methods</th>
<th>6.3 Test Methods</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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</td>
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<tr>
<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
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<tr>
<td>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 (APCCO) may require the manufacturer to conduct a Method 24 analysis.</td>
<td>colorant that is added after the tint base is manufactured. If the manufacturer recommends 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.</td>
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<tr>
<td>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.</td>
<td>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.</td>
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<tr>
<td>6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking 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.</td>
<td>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.</td>
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<tr>
<td>6.3.7 Metal Content of Coatings: The</td>
<td>6.3.7 Metal Content of Coatings: The</td>
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<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
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<td>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, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3, Metallic Pigmented Coating).</td>
<td>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.</td>
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<tr>
<td>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, &quot;Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature&quot; (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoate) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.</td>
<td>6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, &quot;Standard Test Methods for Fire Tests of Building Construction Materials&quot; (see Section 3.0, Fire-Resistive Coating).</td>
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<tr>
<td>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, &quot;Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials,&quot; BAAQMD Manual of Procedures, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</td>
<td>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, SCAQMD Laboratory Methods of Analysis for Enforcement Samples (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish).</td>
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<td>Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, &quot;Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride,&quot; BAAQMD</td>
<td>6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1640-95, &quot;Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products&quot; (see Section 3.0, Pre-Treatment Wash Primer).</td>
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<tr>
<td>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, &quot;Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature&quot; (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and</td>
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<tr>
<td>Conclusion</td>
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<td>Requirement Category</td>
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<td>Requirement Category</td>
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<tr>
<td>6.3.2.</td>
<td>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), &quot;Determination of Volatile Organic Compounds (VOC) in Various Materials,&quot; SCAQMD Laboratory Methods of Analysis for Enforcement Samples.</td>
<td>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 50, subpart D, appendix A, &quot;Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings&quot; (September 11, 1998).</td>
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<tr>
<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
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<tr>
<td>7.0 Compliance Schedule</td>
<td>Persons subject to this rule shall be in compliance with this rule by October 31, 2001.</td>
<td>Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.</td>
</tr>
<tr>
<td>Requirement Category</td>
<td>SIP Version of Rule 4601 (10/31/01)</td>
<td>Non-SIP Version of Rule 4601 (12/17/09)</td>
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<tr>
<td>8.0 Averaging Compliance Option</td>
<td>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 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.</td>
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</tbody>
</table>

Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed. |

No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version. |

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.
<table>
<thead>
<tr>
<th>Requirement Category</th>
<th>SIP Version of Rule 4601 (10/31/01)</th>
<th>Non-SIP Version of Rule 4601 (12/17/09)</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>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.</td>
<td>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.</td>
<td>Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.</td>
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<tr>
<td>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 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.</td>
<td>---</td>
<td>This section has been removed. The operation is required to meet the lacquer VOC limit regardless of temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>---</td>
<td>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.</td>
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<td>---</td>
<td>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.</td>
<td>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.</td>
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</tr>
<tr>
<td>Table of Standards (See Attachment F for Table)</td>
<td>Table of Standards 1 (Effective through 12/31/10) (See Attachment F for Table)</td>
<td>The non-SIP rule requirements are the same as the Table of Standards in the SIP</td>
<td></td>
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</table>
TABLE OF STANDARDS 1 (Effective through 12/31/10)

Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. Manufacturer’s maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

<table>
<thead>
<tr>
<th>COATING CATEGORY</th>
<th>Effective Date: 1/1/2003</th>
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</thead>
<tbody>
<tr>
<td>Flat Coatings</td>
<td>100</td>
</tr>
<tr>
<td>Nonflat Coatings</td>
<td>150</td>
</tr>
<tr>
<td>Nonflat - High Gloss Coatings</td>
<td>250</td>
</tr>
<tr>
<td>Specialty Coatings</td>
<td></td>
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<tr>
<td>Antenna Coatings</td>
<td>530</td>
</tr>
<tr>
<td>Antifouling Coatings</td>
<td>400</td>
</tr>
<tr>
<td>Bituminous Roof Coatings</td>
<td>300</td>
</tr>
<tr>
<td>Bituminous Roof Primers</td>
<td>350</td>
</tr>
<tr>
<td>Bond Breakers</td>
<td>350</td>
</tr>
<tr>
<td>Clear Wood Coatings:</td>
<td></td>
</tr>
<tr>
<td>Clear Brushing Lacquers</td>
<td>680</td>
</tr>
<tr>
<td>Lacquers (including lacquer sanding sealers)</td>
<td>550</td>
</tr>
<tr>
<td>Sanding Sealers (other than lacquer sanding sealers)</td>
<td>350</td>
</tr>
<tr>
<td>Varnishes</td>
<td>350</td>
</tr>
<tr>
<td>Concrete Curing Compounds</td>
<td>350</td>
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<tr>
<td>Dry Fog Coatings</td>
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<tr>
<td>Faux Finishing Coatings</td>
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<td>Fire Resistive Coatings</td>
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<td>Fire-Retardant Coatings</td>
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<td>Clear</td>
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<tr>
<td>Opaque</td>
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<tr>
<td>Floor Coatings</td>
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<tr>
<td>Flow Coatings</td>
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<tr>
<td>Form-Release Compounds</td>
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</tr>
<tr>
<td>Graphic Arts Coatings (Sign Paints)</td>
<td>500</td>
</tr>
<tr>
<td>High Temperature Coatings</td>
<td>420</td>
</tr>
<tr>
<td>Industrial Maintenance Coatings</td>
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<td>Low Solids Coatings</td>
<td>120</td>
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<tr>
<td>Magnesite Cement Coatings</td>
<td>450</td>
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<tr>
<td>Mastic Texture Coatings</td>
<td>300</td>
</tr>
<tr>
<td>Metallic Pigmented Coatings</td>
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<tr>
<td>Multi-Color Coatings</td>
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<td>COATING CATEGORY</td>
<td>Effective Date: 1/1/2003</td>
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<tr>
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<tr>
<td>Pre-Treatment Wash Primers</td>
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<tr>
<td>Primers, Sealers, and Undercoaters</td>
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</tr>
<tr>
<td>Quick-Dry Enamels</td>
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<td>Quick-Dry Primers, Sealers and Undercoaters</td>
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</tr>
<tr>
<td>Recycled Coatings</td>
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<tr>
<td>Roof Coatings</td>
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<tr>
<td>Rust Preventative Coatings</td>
<td>400</td>
</tr>
<tr>
<td>Shellacs:</td>
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<td>730</td>
</tr>
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<td>Specialty Primers, Sealers, and Undercoaters</td>
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<td>Stains</td>
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<td>Swimming Pool Coatings</td>
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<td>Swimming Pool Repair and Maintenance Coatings</td>
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<tr>
<td>Temperature-Indicator Safety Coatings</td>
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<tr>
<td>Traffic Marking Coatings</td>
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<tr>
<td>Waterproofing Sealers</td>
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<tr>
<td>Waterproofing Concrete/Masonry Sealers</td>
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<tr>
<td>Wood Preservatives</td>
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</tbody>
</table>

a Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.
b Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.27.
TABLE OF STANDARDS 2 (Effective on and after 1/1/11)

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

<table>
<thead>
<tr>
<th>COATING CATEGORY</th>
<th>VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011</th>
<th>VOC Limit (g/l) Effective on and after 1/1/2012</th>
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<tbody>
<tr>
<td>Flat Coatings</td>
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<tr>
<td>Nonflat Coatings</td>
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<td>100</td>
</tr>
<tr>
<td>Nonflat - High Gloss Coatings</td>
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<td>150</td>
</tr>
<tr>
<td>Specialty Coatings</td>
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</tr>
<tr>
<td>Aluminum Roof Coatings</td>
<td>400</td>
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<tr>
<td>Basement Specialty Coatings</td>
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<tr>
<td>Bituminous Roof Coatings</td>
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<tr>
<td>Bituminous Roof Primers</td>
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<tr>
<td>Bond Breakers</td>
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<td>Concrete Curing Compounds</td>
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<td>Concrete/Masonry Sealers</td>
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<td>Faux Finishing Coatings</td>
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<td>Fire Resistive Coatings</td>
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<td>Floor Coatings</td>
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<td>Form-Release Compounds</td>
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<td>Industrial Maintenance Coatings</td>
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<tr>
<td>Low Solids Coatings</td>
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<tr>
<td>Magnesite Cement Coatings</td>
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<tr>
<td>Mastic Texture Coatings</td>
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<tr>
<td>Metallic Pigmented Coatings</td>
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<td>Multi-Color Coatings</td>
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<td>Pre-Treatment Wash Primers</td>
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<td>Primers, Sealers, and Undercoaters</td>
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<td>Recycled Coatings</td>
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<td>Roof Coatings</td>
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<tr>
<td>Rust Preventative Coatings</td>
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</table>
TABLE OF STANDARDS 2 (continued) (Effective on and after 1/1/11)

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

<table>
<thead>
<tr>
<th>COATING CATEGORY</th>
<th>VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011</th>
<th>VOC Limit (g/l) Effective on and after 1/1/2012</th>
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<tbody>
<tr>
<td>Shellacs:</td>
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<tr>
<td>Clear</td>
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<td>Opaque</td>
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<tr>
<td>Specialty Primers, Sealers, and Undercoaters</td>
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<tr>
<td>Stains</td>
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<td>Stone Consolidants</td>
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<td>Swimming Pool Coatings</td>
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<td>Traffic Marking Coatings</td>
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<tr>
<td>Tub and Tile Refinish Coatings</td>
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<td>Waterproofing Membranes</td>
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<td>Zinc-Rich Primers</td>
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