



MAR 07 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 # C-722
Project # C-1091456**

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 Kingsburg Cogen Facility for its cogeneration facility located at 11765 Mountain View Road in Kingsburg, 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: Derek Fukuda, Permit Services Engineer

Seyed Sadredin
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) 230-6061

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



MAR 07 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 # C-722
Project # C-1091456**

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 Kingsburg Cogen Facility for its cogeneration facility located at 11765 Mountain View Road in Kingsburg, 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: Derek Fukuda, Permit Services Engineer

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MAR 07 2011

Thomas Murphy
Kingsburg Cogen Facility
1732 W. Genesee St.
Syracuse, NY 13204-1902

**Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # C-722
Project # C-1091456**

Dear Mr. Murphy:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Kingsburg Cogen Facility for its cogeneration facility located at 11765 Mountain View Road in Kingsburg, 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: Jeff Adkins, Sierra Research
Derek Fukuda, Permit Services Engineer

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Madesto, CA 95356-8718
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Bakersfield, CA 93308-9725
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Fresno Bee

**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 Kingsburg Cogen Facility for its cogeneration facility located at 11765 Mountain View Road in Kingsburg, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1091456, 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**

**Title V Permit Renewal Evaluation
Kingsburg Cogen Facility
C-722**

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TITLE V PERMIT RENEWAL EVALUATION
Cogeneration Facility

Engineer: Derek Fukuda
Date: September 2, 2010

Facility Number: C-722
Facility Name: Kingsburg Cogen Facility
Mailing Address: 1732 W. Genesee Street
Syracuse, NY 13204-1902

Contact Name: Thomas Murphy
Phone: (315) 448-2266

Responsible Official: Thomas Murphy
Title: Vice President, PE Kingsburg LLC

Project # : C-1091456
Deemed Complete: April 2, 2009

I. PROPOSAL

Kingsburg Cogen Facility was issued a Title V permit on November 30, 2004. 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

Kingsburg Cogen Facility is located at 11765 Mountain View Road in Kingsburg, CA.

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 is requesting to use the following model general permit templates:

A. Facility wide SJV-UM-0-3

The applicant has requested to utilize template #SJV-UM-0-3 for the facility-wide requirements. Based on the information submitted on the Template Qualification Form (Attachment D), the applicant qualifies for the use of this template.

B. Template SJV-GT-1-3 Series 1 Gas Turbines

The applicant has requested to utilize template no. SJV-GT-1-3, Series 1 Gas Turbines for the 466 MMBtu/hr General Electric LM6000 Sprint model natural gas-fired turbine for permit number N-3233-4.

The applicant qualifies to use this template but the template has not been updated to the current version of District Rule 4703 (amended September 20, 2007). Therefore, the template SJV-GT-1-3 will not be used in this evaluation.

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 2201, New and Modified Stationary Source Review Rule (amended August 20, 1998 ⇒ amended December 18, 2008)
- District Rule 2520, Federally Mandated Operating Permits (adopted June 15, 1995 ⇒ amended June 21, 2001)
- District Rule 4305, Boilers, Steam Generators, Process Heaters – Phase 2 (amended December 19, 1996 ⇒ amended August 21, 2003)
- District Rule 4351, Boilers, Steam Generators, Process Heaters – Phase 1 (amended October 19, 1995 ⇒ amended August 21, 2003)

- District Rule 4623, Storage of Organic Liquids
(amended December 17, 1992 ⇒ amended May 19, 2005)
- District Rule 4703, Stationary Gas Turbines
(amended October 16, 1997 ⇒ amended September 20, 2007)
- 40 CFR Part 60, Subpart A, General Provisions
- 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Industrial Steam Generators
- 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines

B. Rules Removed

- District Rules 8020, 8030, and 8060, Fugitive Dust (PM₁₀) Emissions
(amended April 25, 1996)

These rules were removed on November 15, 2001 and were replaced by District Rules 8021, 8031, and 8061.

C. Rules Added

- District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3 (adopted September 18, 2003 ⇒ amended October 16, 2008)

D. Rules Not Updated

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 4201, Particulate Matter Concentration
(amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)⁽¹⁾

⁽¹⁾ The requirements of 40 CFR Part 64 have not been updated since the time of the last Title V permitting action. However, the requirements of this part were not previously addressed for any of these permit units. Therefore, even though the requirements have not been updated since the time of the initial Title V permitting action, this part will be discussed in Section VII of this evaluation.

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 Adopted

None

B. Rules Not Updated

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

For this facility, condition 2 of the facility-wide requirements C-722-0-2, and conditions 10, 11, 32, and 37 on permit C-722-2-12 are based on the rule listed above and are not Federally Enforceable through Title V.

- District Rule 7012, Hexavalent Chromium – Cooling Towers (*amended December 17, 1992*)

Condition 1 of permit C-722-5-3 is based on the rule listed above and is not Federally Enforceable through Title V.

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 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 3.26, 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.

B. District Rule 2520 – Federally Mandated Operating Permits

This rule was recently amended to incorporate several administrative corrections, clarify rule language, and add procedures for implementing compliance schedules. The only amendments to this rule that will have an effect on current permit requirements are the corrections to Section 9 rule references, as described in the following table:

Old Rule Section	Corrected Rule Section
9.3	9.2
9.4	9.3
9.5	9.4
9.6	9.5
9.7	9.6
9.8	9.7
9.9	9.8
9.10	9.9
9.11	9.10
9.12	9.11
9.13	9.12
9.14	9.13
9.15	9.14
9.16	9.15
9.17	9.16
9.18	9.17
9.19	9.18

Rule 2520, Section 6.4.4, "Other Changes Not Requiring Title V Permit Amendment," allowed the permittee to implement changes, including the addition of new emissions units, without triggering the permit modification or amendment requirements until the time of Title V permit renewal, provided the conditions described in Sections 6.4.4.1 through 6.4.4.2 were met.

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.

C. District Rule 4305 – Boilers, Steam Generators, Process Heaters – Phase 2

The purpose of this rule is to limit emissions oxides of nitrogen (NO_x) and carbon monoxide (CO) from the operation of boilers, steam generators, and process heaters.

Section 5.0, Requirements

Section 5.1.1 requires that except for units subject to Sections 5.2, NO_x emissions shall not exceed the limits specified in the following table. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.00 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen in accordance with Section 8.1.

Rule 4305 Emissions Limits		
	Operated on gaseous fuel	Operated on liquid fuel
	NO_x Limit	NO_x Limit
For all units, except box or cabin type units and vertical cylindrical process heaters.	30 ppmv or 0.036 lb/MMBtu	40 ppmv or 0.052 lb/MMBtu
For box or cabin type units, and vertical cylindrical process heaters.	147 ppmv or 0.18 lb/MMBtu	155 ppmv or 0.2 lb/MMBtu

Section 5.1.2 applies to units operated on combinations of gaseous fuel and liquid fuel. No units at this facility are permitted to operate on combinations of gaseous and liquid fuels. Therefore, this section is not applicable.

Section 5.2 states that each unit that is operated with an annual heat input less than 30 billion Btu per calendar, as made enforceable by permit to operate, shall comply with one of the following:

- 5.2.1 tune the unit at least once each calendar year in which it operates by a qualified technician in accordance with the procedure described in Rule 4304; or
- 5.2.2 operate the unit in a manner that maintains exhaust oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis; or
- 5.2.3 operate the unit in compliance with the applicable emission requirements of Section 5.1 and 5.3.

Section 5.3 states that for units subject to section 5.1, carbon monoxide emissions shall not exceed 400 ppmv.

Compliance with the emission and fuel usage requirements of this rule are demonstrated with permit conditions 6 and 9 on permit C-722-1-9.

Section 5.4, Monitoring Provisions

Section 5.4.1 applies to any unit which simultaneously fires gaseous and liquid fuels, and is subject to the requirements of Section 5.1. No units fire simultaneously on gaseous and liquid fuels. Therefore, this section is not applicable.

Section 5.4.2 requires the operator of any unit subject to the emissions limits specified in Section 5.1 to install and maintain Continuous Emissions Monitoring (CEMS) for NO_x, CO and O₂, or implements an APCO-approved Alternate Monitoring System.

In order to satisfy the requirements of District Rule 4306, the facility is subject to pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NO_x, CO, and O₂ exhaust concentrations be conducted at least once per month (in which a source test is not performed) using a portable analyzer.

Section 5.4.3 states that for units subject to the requirements of Section 5.2.1 or 5.2.2, monitor operational characteristics recommended by the manufacturer and approved by the APCO. The units operated at this facility are not subject to Sections 5.2.1 or 5.2.2. Therefore, this section is not applicable.

Section 5.4.4 states that the operator of any unit subject to Section 5.2.1 or 5.2.2 shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow

measurements shall be periodically compensated for temperature and pressure. A master meter, which measures fuel to all units in a group of similar units, may satisfy these requirements if approved by the APCO in writing. The cumulative annual fuel usage may be verified from utility service meters, purchase or tank fill records, or other acceptable methods, as approved by the APCO.

Compliance with the monitoring provisions of this rule are demonstrated with permit conditions 5, 10, 11, and 13 on permit C-722-1-9.

Section 5.5, Compliance Determination

Section 5.5.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Section 5.5.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Section 5.5.3 pertains to units equipped with Continuous Emissions Monitoring Systems (CEMS). No units at this facility are equipped with CEMS. Therefore this section is not applicable.

Section 5.5.4 requires that for emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NO_x analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Section 5.5.6 establishes the requirements for units subject to startup and shutdown requirements.

Compliance with the testing requirements of this rule are demonstrated with permit conditions 12, 14, 16, and 21 on permit C-722-1-9.

Section 6.1 Recordkeeping

Section 6.1.1 applies to units operated under the exemption of Section 4.2. No units operate under the exemption in Section 4.2. Therefore the requirements in this section are not applicable.

Section 6.1.2 applies to units operated under the exemption of Section 4.3. No units operate under the exemption in Section 4.3. Therefore the requirements in this section are not applicable.

Section 6.1.3 requires that the operator of any unit subject to Section 5.2.1 or 5.2.2 shall record the amount of fuel use on a monthly basis for each unit. The units operated at this facility are not subject to the requirements of Sections 5.2.1 or 5.2.2. Therefore, the requirements in this section are not applicable.

Section 6.1.4 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed. The units operated at this facility are not subject to the requirements of Sections 5.2.1 or 6.3.1. Therefore, the requirements in this section are not applicable.

Section 6.1.4 requires that the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown. The units at this facility are not subject to startup and shutdown provisions. Therefore, this section is not applicable.

Compliance with the recordkeeping requirements of this rule are demonstrated with permit conditions 24 and 25 on permit C-722-1-9.

Section 6.2, Test Methods

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO _x	ppmv	EPA Method 7E or ARB Method 100
NO _x	lb/MMBtu	EPA Method 19
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O ₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

Compliance with the test method requirements of this rule are demonstrated with permit conditions 18, 19, and 20 on permit C-722-1-9.

Section 6.3, Compliance Testing

Section 6.3.1 requires that each unit subject to the requirements of Sections 5.1 or 5.2.3 shall be source tested to determine compliance with the applicable emission limits at least once every 12 months. Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test up to 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in Sections 5.1 or 5.2.3, the source testing frequency shall revert to at least once every 12 months.

Section 6.3.2 states that in lieu of compliance with Section 6.3.1, compliance with the applicable limits in Sections 5.1 or 5.2.3 shall be demonstrated by submittal of annual emissions test results to the District from a unit or units that represents a group of units.

Compliance with the compliance testing requirements of this rule is demonstrated with permit condition 15 on permit C-722-1-9.

D. District Rule 4306 – Boilers, Steam Generators and Process Heaters – Phase 3

The purpose of this rule is to limit emissions oxides of nitrogen (NO_x) and carbon monoxide (CO) from the operation of boilers, steam generators, and process heaters.

Current District Rule 4306 (amended 10/16/08) has not been SIP approved. Attachment E contains the streamlining of the SIP approved District Rule 4306 (9/18/03) to the current District Rule 4306 to show the current rule is as stringent if not more than the SIP approved version.

Section 5.1, NO_x and CO Emissions Limits

Section 5.1.1 requires that except for units subject to Sections 5.2, NO_x and carbon monoxide (CO) emissions shall not exceed the limits specified in the following table. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.0 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.0 percent oxygen in accordance with Section 8.1.

Since permit unit C-722-1-9 is limited by permit condition to 30 billion Btu/year, the applicable emission limit category is listed in Section 5.1.1, Table 1, Category H, from District Rule 4306. The following permit conditions on the PTO demonstrate compliance with this fuel usage limit.

Category	Operated on gaseous fuel		Operated on liquid fuel	
	NO _x Limit	CO Limit	NO _x Limit	CO Limit
H. Units limited by a Permit to Operate to an annual heat input of 9 billion Btu/year to 30 billion Btu/year	30 ppmv or 0.036 lb/MMBtu	400 ppmv	40 ppmv or 0.052 lb/MMBtu	400 ppmv

Compliance with the NO_x and CO emission requirements and fuel usage limits of this rule are demonstrated with permit conditions 6 and 9 on permit C-722-1-9.

Section 5.2, Low Use

The units at this facility annual heat input will exceed the 9 billion Btu heat input per calendar year criteria limit addressed by this section. Since the unit is not subject to Section 5.2, the requirements of this section will not be discussed.

Section 5.3, Startup and Shutdown Provisions

Section 5.3 states that on and after the full compliance schedule specified in Section 7.1, the applicable emission limits of Sections 5.1, 5.2.2 and 5.2.3 shall not apply during start-up or shutdown provided an operator complies with the requirements specified in Sections 5.3.1 through 5.3.4. Since the unit is not subject to Section 5.3, the requirements of this section will not be discussed.

Section 5.4, Monitoring Provisions

Section 5.4.1 states that the operator of any unit which simultaneously fires gaseous and liquid fuels, and is subject to the requirements of Section 5.1, shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure.

Section 5.4.2 states that the operator of any unit subject to the applicable emission limits in Sections 5.1 shall install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NO_x, CO, and oxygen, or implement an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Part 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). An APCO approved Alternate Monitoring System shall monitor one or more of the following:

- periodic NO_x and CO exhaust emission concentrations,
- periodic exhaust oxygen concentration,
- flow rate of reducing agent added to exhaust,
- catalyst inlet and exhaust temperature,
- catalyst inlet and exhaust oxygen concentration,
- periodic flue gas recirculation rate,
- other operational characteristics.

In order to satisfy the requirements of District Rule 4306, the facility is subject to pre-approved alternate monitoring scheme A (pursuant to District Policy SSP-1105), which requires that monitoring of NO_x, CO, and O₂ exhaust concentrations be conducted at least once per month (in which a source test is not performed) using a portable analyzer.

Section 5.4.3 states requirements for units that are limited to a heat input less than 9 billion Btu per year. The applicant does not operate any units that are limit to a annul heat input less than 9 billion Btu; therefore the requirements of this section are not applicable to the unit in this project.

Section 5.4.4 states that the operator of any Category H unit listed in Section 5.1.1 Table 1 and any unit subject to Section 5.2.1 or 5.2.2 shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure. A master meter, which measures fuel to all units in a group of similar units, may satisfy these requirements if approved by the APCO in writing. The cumulative annual fuel

usage may be verified from utility service meters, purchase or tank fill records, or other acceptable methods, as approved by the APCO.

Section 5.4.5 states the requirements for an APCO approved alternative monitoring system. The applicant only uses APCO approved monitoring schemes; therefore the requirements of this section are not applicable to the unit in this project.

Compliance with the monitoring provisions of this rule is demonstrated with permit conditions 5, 10, 11, and 13 on permit C-722-1-9.

Section 5.5, Compliance Determination

Section 5.5.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Section 5.5.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Section 5.5.4 requires that for emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NO_x analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Compliance with the requirements in Section 5.5 of this rule is demonstrated with permit conditions 12, 14, 16, and 21 on permit C-722-1-9.

Section 6.1, Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.4 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Section 6.1.1 applies to units seeking exemption under Section 4.2. None of the units at this facility are subject to the exemption.

Section 6.1.2 requires that the operator of a unit subject to Category H unit listed in Section 5.1.1 Table 1 or to Section 5.2 shall record the amount of fuel use at least on a monthly basis.

Section 6.1.3 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed. Section 6.3.1 states that tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored. The unit in this project maintains an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored; therefore the requirements of this section are not applicable to the unit in this project.

Section 6.1.4 requires the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.

Compliance with the recordkeeping requirements of this rule are demonstrated with permit conditions 24 and 25 on permit C-722-1-9.

Section 6.2, Test Methods

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO _x	ppmv	EPA Method 7E or ARB Method 100
NO _x	lb/MMBtu	EPA Method 19
CO	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O ₂	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

In addition, fuel hhv shall be certified by third party fuel supplier or determined by: 6.2.1.1 ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; 6.2.1.2 ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

Compliance with the test method requirements of this rule are demonstrated with permit conditions 18, 19, and 20 on permit C-722-1-9.

Section 6.3, Compliance Testing

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months. Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test up to 36 months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every 12 months.

In addition, since the applicant has proposed to use pre-approved Alternate Monitoring Scheme "A" using a portable analyzer, the tune-up requirements listed in Section 6.3.1 is not applicable to the boiler. Section 6.3.1 also requires that, during the 36-month source testing interval, the owner/operator shall monthly monitor the operational characteristics recommended by the unit manufacturer. Since the pre-approved Alternate Monitoring Scheme "A" using a portable analyzer requires monthly monitoring of NO_x, CO, and O₂ exhaust emissions concentrations, operational characteristics monitoring requirement is satisfied, and no further discussion is required.

Section 6.3.2 states that in lieu of compliance with Section 6.3.1, compliance with the applicable emission limits in Sections 5.1 or 5.2.3 shall be demonstrated by submittal of annual emissions test results to the District from a unit or units that represents a group of units. Since there is only one boiler operated at this facility this section is not applicable to this facility.

Compliance with the compliance testing requirements of this rule is demonstrated with permit condition 15 on permit C-722-1-9.

E. District Rule 4623 - Storage of Organic Liquids

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids.

Section 4.4 states that tanks exclusively receiving and/or storing an organic liquid with a TVP less than 0.5 psia are exempt from all other requirements of the rule except for complying with the following provisions:

- TVP and API Gravity Testing provisions pursuant to Section 6.2,
- Recordkeeping provisions pursuant to Section 6.3.6,
- Test Methods provisions pursuant to Section 6.4, and
- Compliance schedules pursuant to Section 7.2.

All the tank permits at this facility meet this exemption and therefore they will only be subject to the sections of the rule listed above.

Each of these tanks contain a maximum of 1,000 ppm VOC (ethanol). The TVP testing methods listed in Rule 4623 requires that the true vapor pressure of organic liquids be determined by first measuring the Reid Vapor Pressure (RVP) and then converting this result to a TVP. The prescribed test method for determining RVP is ASTM D323-94. However, this test method is only applicable to organic liquids such as gasoline, volatile crude oil, and other petroleum products. This test method is not applicable to ethanol/water mixtures.

The calculated TVP for each tank is 0.019 psia (based on project C-1053850). Since the calculated TVP is much less than the TVP exemption limit of 0.5 psia and the test methods listed in §6.4 of Rule 4623 do not apply to ethanol/water mixtures, TVP and API gravity testing will be waived for this operation. §6.3.6 requires the owner/operator to submit records of TVP and API gravity testing in accordance with the requirements of §6.2 to the APCO within 45 days of testing. Since testing will not be required, this requirement does not apply.

Compliance with the requirements of this rule are demonstrated with permit condition 4 on permits C-722-6-2, -7-2, and -9-2.

F. 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.

The gas turbine is rated at a heat input rate greater than 3 MMBtu/hour. Therefore, the turbine is subject to the requirements of this rule.

Section 3.0 - Definitions

Section 3.23 defines reduced load period as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate, not to exceed one hour. This definition will be included as condition 13 on permit C-722-2-12.

Section 5.1 – NO_x Emission Requirements

Section 5.1.2, Table 5-2, Tier 2 NO_x Compliance Limits, requires the owner or operator to achieve less than or equal to 5 ppmvd NO_x @ 15% O₂ to meet Tier-2 compliance schedule listed in Section 7.2.

Tier 2 NO _x Compliance Limits			
Turbine Classification Rating	Compliance Option (see Section 7.2)	NO _x Compliance Limit, ppmvd at 15% O ₂	
		Gas Fuel	Liquid Fuel
d) Greater than 10 MW, Combined cycle	Standard	5	25

The turbine in this project is used in a combined cycle configuration to generate 34.5 MW; therefore it is subject to limit d) Greater than 10 MW, Combined cycle.

Section 5.2 – CO Emission Requirements

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% O₂. 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 these two sections is demonstrated with permit conditions 7, 8, 18, and 31 on permit C-722-2-12.

Section 5.3 – Transitional Operation Periods

NO_x and CO emission limits (listed above) shall not apply during a transitional operation period, which includes bypass transition period, primary re-ignition period, reduced load period, start-up or shutdown (each term is defined in Section 3.0 of Rule 4703), provided an operator shall 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 met¹.
- Each reduced load period shall not exceed one hour.

The facility has demonstrated compliance with the two hour startup and shutdown duration requirements. Compliance with this section is demonstrated with permit condition 14 on permit C-722-2-12.

Section 6.2 - Monitoring and Recordkeeping

Section 6.2.1 requires the owner to operate and maintain continuous emissions monitoring equipment for NO_x and oxygen, or install and maintain APCO-approved alternate monitoring. The facility operates a Continuous Emissions Monitoring System (CEMS) that monitors the NO_x and O₂ concentrations of the turbine.

Section 6.2.2 specifies monitoring requirements for turbines without exhaust-gas NO_x control devices. For turbines without exhaust-gas NO_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 continuously monitors NO_x emissions; therefore the monitoring requirements of this section are met.

Section 6.2.3 states that for units 10 MW and greater that operated an average of more than 4,000 hours per year over the last three years before August 18, 1994, the owner or operator shall monitor the exhaust gas NO_x emissions. The NO_x monitoring system shall meet EPA requirements as specified in 40 CFR Part 60 App. B, Spec. 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7 (c), 60.7

¹ This requirement is applicable to a gas turbine with dry low-NO_x combustors. Each turbine under this project is equipped with water injection system. Thus, this requirement is not applicable to these units.

(d), and 60.13, or other systems that are acceptable to the EPA. The owner or operator shall submit to the APCO information demonstrating that the emission monitoring system has data gathering and retrieval capability. The facility monitors the NO_x emissions from their turbine with a CEM system that meets all EPA and reporting requirements.

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. The facility will maintain records according to the requirements of this section. Therefore, the recordkeeping requirements of this section are met.

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_x output. Since this unit is 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. The facility will be required to maintain a log in accordance with the requirements of this section.

Section 6.2.7 establishes recordkeeping requirements for units that are exempt pursuant to the requirements of Section 4.2. Each of the proposed turbines is subject to the requirements of this rule. Therefore, the requirements of this section are not applicable and no further discussion is required.

Section 6.2.8 requires owners or operators performing startups or shutdowns to keep records of the duration of each startup and shutdown. As discussed in the Section 6.2.6 discussion above for this rule, the facility will maintain an operating log that will satisfy the requirements of this section.

Compliance with the monitoring and recordkeeping requirements of this rule are demonstrated with permit conditions 15, 23, 36, 38, and 39 on permit C-722-2-12.

Sections 6.3 and 6.4 - Compliance Testing

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 NO_x and CO concentrations. The gas turbine is required to be tested annually to ensure compliance with NO_x and CO concentrations.

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.

Section 6.4 states that the facility must demonstrate compliance annually with the NO_x 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.

Conditions will be added to will ensure continued compliance with the test method requirements of this section.

Compliance with the compliance testing requirements of this rule is demonstrated with conditions 18, 28, 29, and 31 on permit C-722-2-12.

G. 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Industrial Steam Generators

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction). Subpart Dc has standards for SO_x and PM₁₀. The 44 MMBtu/hr boiler is subject to Subpart Dc requirements.

§60.332 Standard for Sulfur Dioxide:

Since coal is not combusted by the boiler in this project, the requirements of this section are not applicable.

§ 60.43c Standards for Particulate Matter

The boiler is not fired on coal, combusts mixtures of coal with other fuels, combusts wood, combusts mixture of wood with other fuels, or oil; therefore it will not be subject to the requirements of this section.

§60.44c Compliance and Performance Tests Methods and Procedures for Sulfur Dioxide.

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

§60.45c Compliance and Performance Test Methods and Procedures for Particulate Matter

Since the boiler in this project is not subject to the particulate matter requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

§60.46c Emission Monitoring for Sulfur Dioxide

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

§60.47c Emission Monitoring for Particulate Matter

Since the boiler in this project is not subject to the particulate matter requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

§60.48c Reporting and Recordkeeping Requirements

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

The design heat input capacity and type of fuel combusted at the facility will be listed on the unit's equipment description. No conditions are required to show compliance with this requirement.

- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the units are not subject to §60.42c or §40.43c.

- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility has not proposed an annual capacity factor; therefore one will not be required.

- (4) Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with an emerging technology used to control SO₂ emissions.

Section 60.48 c (g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Section 60.48 c (i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4306 requires that records be kept for five years.

Compliance with the requirements of this subpart are demonstrated with permit conditions 5 and 23 on permit C-722-1-9.

H. **40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines**

Based on the conditions in Permits to Operate, each gas turbine engine is subject to the requirements of this subpart. These requirements and their compliance determination are briefly discussed in the following section.

§60.332 Standard for NO_x:

§60.332(b) requires that electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the NO_x emission limit calculated using the following equation:

$$\text{STD} = 0.0075 \frac{(14.4)}{Y} + F; \text{ where}$$

STD = allowable ISO corrected NO_x emission concentration in % by volume @ 15% O₂ on dry basis

Y = Manufacturer's rated heat rate at manufacturer's rated load (kJ/w-hr) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The Y shall not exceed 14.4 kJ/w-hr.

F = NO_x emission allowance for fuel-bound nitrogen.

40 CFR §60.332 requires that Y not exceed 14.4 kJ/W-hr. 14.4 kJ/W-hr will be used as a worst case.

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

$$\text{STD} = 0.0150 \frac{(14.4)}{14.4} + 0 = 0.0075 \text{ \% by volume @ 15\% O}_2 \text{ (75 ppmv @ 15\% O}_2\text{)}$$

Kingsburg Cogen Facility complies with a NO_x concentration limit of 5 ppmv @ 15% O₂. Therefore, continued compliance with the NO_x standard is expected.

§60.333 Standard for SO_x:

§60.333(a) requires that emissions of sulfur dioxide shall not exceed 0.015 percent by volume dry @ 15% O₂ (150 ppmvd @ 15% O₂).

The 150 ppmvd @ 15% O₂ limit specified in §60.333(a) is equivalent to 0.764 lb-SO₂/MMBtu. This number is determined as follows:

$$\frac{(150 \times 10^{-6}) \times \left(8,578 \frac{\text{ft}^3}{\text{MMBtu}}\right) \times \left(64 \frac{\text{lb} - \text{SO}_2}{\text{lb} - \text{mol}}\right) \times \left(\frac{20.95}{20.95 - 15}\right)}{\left(379.5 \frac{\text{ft}^3}{\text{lb} - \text{mol}}\right)} = 0.764 \frac{\text{lb} - \text{SO}_2}{\text{MMBtu}}$$

The units at this facility are permitted to have an emission factor of 0.0029 lb-SO_x/MMBtu. This is less than that of the maximum allowable emission standard of 0.764 lb-SO_x/MMBtu. Thus, compliance is expected with §60.333(a).

Compliance with the NO_x and SO_x Standards sections are demonstrated with permit conditions 3, 7, and 12 on permit C-722-2-12.

§60.334 Monitoring of Operations

§60.334 (c) For any turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO_x 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 NO_x emission limit under §60.332, that approved procedure may continue to be used. The turbine in this project is equipped with a CEMS that meets the requirements in paragraph (b).

§60.334(h)(3)(i) and (ii) requires the owner or operator to keep sulfur content records using valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum sulfur content of the fuel is 20 grains/100 scf or less or perform a *representative fuel sampling* to show the sulfur content of gaseous fuel does not exceed 20 grains/100 scf.

§60.334(j) states that for each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction.

§60.334(j)(2)(i) states for samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling for the unit's storage tank, an excess sulfur dioxide emissions occurs each unit

operating hour included in the period beginning on the date and hour of any sample for which sulfur content of the fuel fired in the gas turbine exceeds 0.8% (by weight) and ending on the date and hour that a subsequent sample is taken that demonstrate compliance with the sulfur limit.

Each permit unit has been permitted with a SO_x emission rate of 0.0029 lb/MMBtu, which is less than 0.689 lb/MMBtu (0.8 lb-S/100 lb-fuel x 64 lb-SO₂/32 lb-S x 0.0439 lb-fuel/ft³ x ft³/1,020 Btu x 10⁶ Btu/MMBtu). Therefore, it is not necessary to define a less stringent limit.

§60.334(j)(2)(ii) defines excess sulfur dioxide emissions when each delivery of fuel oil has been selected. This turbine is fired exclusively on natural gas fuel. Thus, requirements of this section are not applicable.

§60.334(j)(2)(iii) defines monitor downtime for sulfur dioxide emissions occur when a required sample is not taken by its due date. Monitor downtime also begins if invalid results are obtained for a fuel sample. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

§60.334(j)(5) requires the owner or operator to postmark the reports required under §60.7(c) by the 30th day following the end of each 6-month period.

Compliance with the monitoring of operations section is demonstrated with permit conditions 3, 7, 15, and 24 on permit C-722-2-12

§60.335 Test Methods and Procedure

§60.335(a) states that the owner or operator shall conduct the performance tests required in §60.8 using EPA Method 20, ASTM D6522-00 or EPA Method 7E and either EPA Method 3 or 3A to determine NO_x and diluent concentration. Sampling traverse points are to be selected following Method 20 or Method 1.

§60.335(b)(1) states that for each run of the performance test, the mean nitrogen oxide emission concentration @ 15% O₂ shall be corrected to ISO standard conditions using the equation listed in this section to demonstrate compliance with NSPS NO_x standard.

§60.335(b)(2) states that the 3-run performance test must be performed within +/-5% at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice.

§60.335(b)(3) states that for a combined cycle turbine system with duct burner, the owner may elect to measure turbine NO_x emissions after the duct burner rather than directly after turbine. Rule 4703 requires the facility to test the turbine system with duct burner “on” and “off” configurations. Therefore, no further discussion is required.

Compliance with the test methods and procedures in this section are demonstrated with permit conditions 28 and 31 on permit C-722-2-12.

I. 40 CFR Part 64 – CAM

§64.2 – Applicability

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

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

Pollutant	Major Source Threshold (lb/year)
VOC	50,000
NO _x	50,000
CO	200,000
PM ₁₀	140,000
SO _x	140,000

C-722-1-9: 44 MMBTU/HR NATURAL GAS-FIRED ZURN BROOKS STANDBY BOILER, S/N 100025, WITH LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) SYSTEM

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO_x emissions.
- 3) The boiler is equipped with a low NO_x burner, which is an integral control, and employs FGR as add-on control. Therefore, in determining CAM applicability, pre-control potential to emit will be evaluated using the emissions with low NO_x burner only without FGR. The natural gas

emission factor for NO_x with low NO_x burner and without FGR is 50 lb/MMscf or 0.049 lb/MMBtu (AP-42, Table 1.4-1, July 1998).

Pre-control Annual PE:

$$\begin{aligned} \text{PE} &= \text{EF (lb/MMBtu)} \times \text{Heat Input (MMBtu/hr)} \times 8,760 \\ &\quad \text{hr/year} \\ &= (0.049 \text{ lb-NO}_x\text{/MMBtu}) \times (44 \text{ MMBtu/hr}) \times (8,760 \\ &\quad \text{hr/year}) \\ &= \mathbf{18,887 \text{ lb-NO}_x\text{/year}} \end{aligned}$$

Since 18,887 lb-NO_x/yr < 50,000 lb-NO_x/yr (Major Source threshold for NO_x), this unit is not subject to CAM for NO_x emissions.

S-722-2-14: 34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH SELECTIVE CATALYTIC REDUCTION AND A HEAT RECOVERY STEAM GENERATOR UNIT

- 1) This unit contains emission limits for NO_x, SO_x, PM₁₀, CO, and VOC.
- 2) This unit is served by a Selective Catalytic Reduction (SCR) system to control NO_x emissions. Since the unit has continuous emission monitors (CEMS) for the NO_x emissions, CAM is not applicable and the equipment is exempt from CAM requirements. The standard conditions that require the CEMs to be calibrated, maintained, and require the data to be reported ensure that the equipment will remain exempt from CAM requirements.

S-722-4-1: 20,000 GALLON SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AN AMMONIA STORAGE TANK, METERING, INJECTION, AND RECORDING DEVICES

- 1) This unit does not contain any emission limits for NO_x, SO_x, PM₁₀, CO, and VOC. Therefore, this unit is not subject to CAM.

S-722-5-3: ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION

- 1) This unit contains a daily emission limit for VOC emissions.
- 2) This unit does not have any add-on controls for VOC emissions. Therefore, this unit is not subject to CAM.

S-722-6-2: 300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT #2)

- 1) This unit contains a daily and annual emission limit for VOC emissions.
- 2) This unit does not have any add-on controls for VOC emissions. Therefore, this unit is not subject to CAM.

S-722-7-2: 300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT#3)

- 1) This unit contains a daily and annual emission limit for VOC emissions.
- 2) This unit does not have any add-on controls for VOC emissions. Therefore, this unit is not subject to CAM.

S-722-8-2: FRUCTOSE RECLAMATION SYSTEM CONSISTING OF A 5-EFFECT EVAPORATOR, A CONDENSER, AND A PERMIT EXEMPT 25,000 GALLON CONCENTRATE STORAGE TANK (CST, STORES CLEAN PRODUCED WATER)

- 1) This unit contains an emission limit for VOC emissions.
- 2) This unit does not have any add-on controls for VOC emissions. Therefore, this unit is not subject to CAM.

S-722-9-2: 300,000 GALLON FIXED ROOF CONDENSATE STORAGE TANK (PWT #1) AND A PERMIT EXEMPT 300,000 GALLON WELLWATER STORAGE TANK (STORES CLEAN PRODUCED WATER)

- 1) This unit contains an emission limit for VOC (ethanol) emissions.
- 2) This unit does not have any add-on controls for VOC emissions. Therefore, this unit is not subject to CAM.

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

1. Model General Permit Template SJV-UM-0-3

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template is included as conditions 41 and 42 of the facility-wide requirements (C-722-0-2).

B. Requirements not Addressed by Model General Permit Templates

Kingsburg Cogeneration Facility is not requesting any new permit shields within this Title V renewal project. In addition, Kingsburg Cogeneration Facility is not requesting any changes to the existing permit shields already included in their Title V operating permit. Therefore, all of the existing permit shields will be maintained on the revised permit for this renewal project.

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Existing Title V Operating Permit
- C. Detailed Facility List
- D. Template Qualification Form
- E. Current District Rule SIP Comparisons

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: C-722-0-2

EXPIRATION DATE: 04/30/2009

FACILITY-WIDE REQUIREMENTS

1. The facility-wide VOC emissions shall not exceed 26.9 tons per year. [District NSR Rule] Federally Enforceable Through Title V Permit
2. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. {4362} 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
4. {4363} 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
5. {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
6. {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
7. {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
8. {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
9. {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
10. {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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: KINGSBURG COGEN FACILITY
Location: 11765 MOUNTAIN VIEW, KINGSBURG, CA 93631
C-722-0-2: Sep 9 2010 8:08AM - FUKUDAD

11. {4370} 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
12. {4371} 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
13. {4372} 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
14. {4373} 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
15. {4374} 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
16. {4375} 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
17. {4376} 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
18. {4377} 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
19. {4378} 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
20. {4379} 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
21. {4380} 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
22. {4381} 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
23. {4382} 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.

24. {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
25. {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
26. {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
27. {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
28. {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
29. {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
30. {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
31. {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
32. {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
33. {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
34. {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
35. {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 Rule 8011] Federally Enforceable Through Title V Permit

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

36. {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
37. {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
38. {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
39. {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
40. {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
41. {4400} 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), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. {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
43. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 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: C-722-1-9

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

44 MMBTU/HR NATURAL GAS-FIRED ZURN BROOKS STANDBY BOILER, S/N 100025, WITH LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. This boiler shall operate only when the turbine/generator system (C-722-2) is not operating. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. {450} Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
4. The flue gas recirculation system shall be operated whenever the boiler is in use. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District NSR Rule and District Rules 4305, 5.4, 4306, 5.4, and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
6. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District NSR Rule and District Rules 4305, 5.2 and 4306, 5.1] Federally Enforceable Through Title V Permit
7. Consumption of natural gas shall not exceed 816,000 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The unit shall only be fired on PUC-regulated natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmv NO_x @ 3% O₂ or 0.036 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.010 lb-PM₁₀/MMBtu, 200 ppmv CO @ 3% O₂ or 0.1456 lb-CO/MMBtu, or 0.004 lb-VOC/MMBtu. [District NSR Rule and District Rules 4305, 5.1, 5.2, and 5.3 and 4306, 5.1] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 2520, 9.3] 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. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 2520, 9.3] Federally Enforceable Through Title V Permit
12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.5, 4306, 5.5, and 2520, 9.3] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 5.4, 4306, 5.4, and 2520, 9.4] Federally Enforceable Through Title V Permit
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3 and 4306, 6.3] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5 and 4306, 5.5] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
20. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5 and 4306, 5.5] 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.

22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.5] Federally Enforceable Through Title V Permit
23. Copies of all gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted, fuel sources, and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2 and 40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
24. Records of monthly and annual heat input of the unit shall be maintained. [District NSR Rule and District Rules 4305, 6.1, 4306, 6.1, and 2520, 9.4] Federally Enforceable Through Title V Permit
25. 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 Rules 1070, 4305, 6.1, 4306, 6.1, and 2520, 9.4] Federally Enforceable Through Title V Permit
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 404 (Madera) 406 (Fresno), and 407 (all six remaining counties in the San Joaquin Valley); SJVUAPCD Rule 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. {2814} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4201 and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 1081. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
29. {2815} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4305, Sec. 4.2, 5.1.1, 5.1.2., 5.4, 6.1.1, 6.2 (excepting 6.2.3), 6.3, 8.1 and Rule 4351 Sec 4.2, 5.2.2.1, 5.2.2.2, 6.1.1, 6.2 (excepting 6.2.3), 8.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
30. {2810} The requirements of 40 CFR 72.6(b) are not applicable because this is not an affected unit under the acid rain provisions. The requirements of 40 CFR 60.40c do not apply to this source because it is not used to produce electricity for sale. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

DRAFT

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-2-12

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH SELECTIVE CATALYTIC REDUCTION AND A HEAT RECOVERY STEAM GENERATOR UNIT

PERMIT UNIT REQUIREMENTS

1. Permit units C-722-2 and C-722-1 shall not operate simultaneously. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The gas turbine shall incorporate a 200 hp electric motor as starter engine, a fuel control module to regulate the fuel rate based on exhaust temperature and fuel output, and a steam injection system with metering and recording devices. [District NSR Rule] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule, 40 CFR 60.333(b) and 60.334; County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
4. Natural gas fuel consumption rate shall not exceed 6,480 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown, emission rates from the gas turbine/HRSG unit shall not exceed any of the following: 5.0 ppmvd NO_x @ 15% O₂ (based on a 3-hour rolling average with at least one sample point per 15-minute interval), 0.0029 lb-SO_x/MMBtu, 0.006 lb-PM₁₀/MMBtu, 34 ppmv CO @ 15% O₂, 0.023 lb-VOC/MMBtu, or 15 ppmv-ammonia @ 15% O₂. [40 CFR 60.332, 60.333, and 60.334, District NSR Rule; District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
8. During start-up and shutdown, emission rates from the gas turbine/HRSG unit shall not exceed any of the following: 0.0029 lb-SO_x/MMBtu, 0.006 lb-PM₁₀/MMBtu, 0.023 lb-VOC/MMBtu. [District NSR Rule; and District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
9. Daily emissions from the gas turbine/HRSG unit shall not exceed any of the following (including thermal stabilization periods): 119.2 lb-NO_x/day, 18.8 lb-SO_x/day, 38.9 lb-PM₁₀/day, 493.8 lb-CO/day, or 149.0 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. The ammonia concentration shall not exceed 15 ppmv at 15% O₂. The ammonia concentration limits shall not apply during startup, which is not to exceed four hours, or shutdown, which is not to exceed two hours. [District Rule 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd across the catalyst corrected to 15% O2 after performing (inlet - outlet) subtraction, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
12. {2257} Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 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. {2264} 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
14. Start-up is 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 operation. Shut down is defined as the period of time during which a unit 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 unit is completely turned off. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703, 5.3] Federally Enforceable Through Title V Permit
15. Permittee shall install, operate, and maintain in calibration a system that continuously measures and records the exhaust gas NOx and O2 concentrations. The NOx and O2 continuous emissions monitoring systems shall meet EPA requirements as specified in 40 CFR Part 60 or other systems that are acceptable to the EPA. [40 CFR 60.334(b), District Rules 2520, 9.3.2, 4102, and 4703, 6.2.1 and 6.2.3] Federally Enforceable Through Title V Permit
16. The Continuous Emissions Monitoring equipment must be linked to a data logger which is compatible with the District's Data Acquisition System. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. All CEM 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. [District Rule 2520, 9.3.2 and 40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
18. Emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with the applicable test method, or, for continuous emission monitoring data, all applicable requirements of 40 CFR 60. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
19. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rules 1080, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. All CEM systems shall meet the performance specification requirements (including thermal stabilization periods) 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 Rules 1080, 6.5, 6.6 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. 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 Rules 1080, 7.1 and 2520, 9.5.2] 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.

22. Results of CEM systems shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2 and 2520, 9.3.2 and 60.13(h)] Federally Enforceable Through Title V Permit
23. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM system in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 2520, 9.3.2 and 4703, 6.2.3] Federally Enforceable Through Title V Permit
24. Permittee shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: 1) time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 2) 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; 3) applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and 5) a negative declaration when no excess emissions occurred. [40 CFR 60.7(c) and 60.334 and District Rules 1080, 8.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
25. A violation of the NO_x emission standard during a three hour averaging period indicated by the CEM system shall be reported to the APCO within 96 hours. [District Rules 1080, 9.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
26. {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
27. {2255} The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
28. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335, and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
29. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
30. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
31. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x 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, 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
32. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rule 4102]
33. Source testing to measure the VOC emission rates (lb/hr and ppmvd @ 15% O₂) shall be conducted every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
34. Source testing to measure the PM₁₀ emission rate (lb/MMBtu) and the ammonia emission rate (ppmv @ 15% O₂) shall be conducted once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
35. Source testing to measure volatile organic compounds (VOC) shall be conducted using EPA Method 18 or 25. [District Rule 1081] Federally Enforceable Through Title V Permit
36. 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
37. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rule 4102]

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

38. Permittee shall maintain records of the following: 1) the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the permit unit; 2) performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS; and 3) emission measurements. [District Rules 1080, 7.3, 2520, 9.4.2, 4703, 6.2.8, and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
39. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.4.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit
40. {2280} 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
41. 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) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i), and (j), and 60.335 (b), and (c). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
42. 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
43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: 40 CFR 60.42b, 43b, 44b, 46b, 48b, and 49b. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-722-4-1

EXPIRATION DATE: 04/30/2009

SECTION: 10 TOWNSHIP: 16S RANGE: 22E

EQUIPMENT DESCRIPTION:

20,000 GALLON SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AN AMMONIA STORAGE TANK, METERING, INJECTION, AND RECORDING DEVICES

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. Ammonia slip shall be monitored in the exhaust by use of a continuous monitoring system. [District Rule 1080]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-5-3

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION

PERMIT UNIT REQUIREMENTS

1. No compound containing hexavalent chromium shall be added to the cooling tower. [District Rule 7012]
2. Owner/operator shall operate and maintain a Data Acquisition System (DAS) for the necessary information to calculate the VOC emissions as required by the approved Monitoring Plan. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. DAS shall include records of the temperature of incoming circulating water in the cooling tower on a continuous basis, averaged on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. DAS shall record the operating schedule and speed of the cooling tower fan (full-speed, half-speed) on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Owner/operator shall perform weekly sampling of the cooling tower blowdown water for laboratory analysis of ethanol concentration. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Owner/operator shall maintain in good working order a flow meter that measures the total flow of raisin rinse water received from Sun-Maid facility, and flow monitoring device that measures the amount of water flowing from raw water storage to this cooling tower operation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All records shall be maintained, retained for at least five years, and made available for District inspection upon request. [District Rules 2201, 2520, 9.3.2 and 1070] Federally Enforceable Through Title V Permit
8. A report shall be submitted to the District within 30 days of the end of each calendar quarter. The report shall include average daily VOC (ethanol) emissions from the cooling tower (C-722-5), gas turbine (C-722-2), and total facility for the previous calendar quarter. The report shall also summarize total facility VOC emissions for the four calendar quarters immediately prior to the report. [District Rules 2201, 2520, 9.5.2 and 1070] Federally Enforceable Through Title V Permit
9. VOC emissions from the cooling tower operation shall not exceed 609 pounds per day averaged over a calendar quarter. [District Rule 2201] 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: C-722-6-2

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT #2)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the raisin rinsewater shall not exceed 1000 mg/L. [District NSR Rule and 4623] Federally Enforceable Through Title V Permit
5. The ethanol concentration of the raisin rinsewater for this unit shall be verified by measuring the ethanol concentration of the condensate stored in the condensate tank (C-722-9). [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emissions from this storage tank shall not exceed either of the following limits: 0.4 lb-VOC/day or 45 lb-VOC/year. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the combined daily and cumulative annual quantity of raisin rinse water delivered tanks PWT #2 and PWT #3 (C-722-6 and C-722-7). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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 NSR Rule] 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: C-722-7-2

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT#3)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the raisin rinsewater shall not exceed 1000 mg/L. [District NSR Rule and 4623] Federally Enforceable Through Title V Permit
5. The ethanol concentration of the raisin rinsewater for this unit shall be verified by measuring the ethanol concentration of the condensate stored in the condensate tank (C-722-9). [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emissions from this storage tank shall not exceed either of the following limits: 0.4 lb-VOC/day or 45 lb-VOC/year. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the combined daily and cumulative annual quantity of raisin rinse water delivered tanks PWT #2 and PWT #3 (C-722-6 and C-722-7). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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 NSR Rule] 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: C-722-8-2

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

FRUCTOSE RECLAMATION SYSTEM CONSISTING OF A 5-EFFECT EVAPORATOR, A CONDENSER, AND A PERMIT EXEMPT 25,000 GALLON CONCENTRATE STORAGE TANK (CST, STORES CLEAN PRODUCED WATER)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. VOC emissions from the condenser process vent shall not exceed 8.5 E-6 lb/cubic foot of exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The condenser process vent's exhaust flow rate shall not exceed 700 CFM. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall keep a record of the daily VOC emissions from the process vent. The following calculation shall be used to determine daily emissions: Daily VOC emissions = Time Operated (Minutes) x 700 CFM x 8.5 E-6 lb/cubic foot of exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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 NSR Rule] 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: C-722-9-2

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON FIXED ROOF CONDENSATE STORAGE TANK (PWT #1) AND A PERMIT EXEMPT 300,000 GALLON WELLWATER STORAGE TANK (STORES CLEAN PRODUCED WATER)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The quantity of condensate delivered to this tank shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The quantity of condensate delivered to this tank shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the condensate shall not exceed 1000 mg/L. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Permittee shall perform monthly sampling of the condensate for laboratory analysis to determine the ethanol concentration. If six consecutive monthly samples demonstrate that the ethanol concentration is less than 900 mg/L, then the monitoring frequency shall be reduced to quarterly. If an exceedance from the 1000 mg/L limit is observed in a quarterly sample, monitoring shall revert to monthly sampling until six consecutive samples demonstrate that the ethanol content is less than 900 mg/L. [District NSR Rule] Federally Enforceable Through Title V Permit
6. EPA Method 8015 shall be used to determine the ethanol concentration of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the results of the laboratory analysis of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall keep a record of the results of sampling of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
10. 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 NSR Rule] Federally Enforceable Through Title V Permit

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

ATTACHMENT B

Existing Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: C-722-0-1

EXPIRATION DATE: 04/30/2009

FACILITY-WIDE REQUIREMENTS

1. The facility-wide VOC emissions shall not exceed 26.9 tons per year. [District NSR Rule] 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. 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
4. 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
5. 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
6. 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
7. 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
8. 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
9. 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
10. 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: KINGSBURG COGEN FACILITY
Location: 11765 MOUNTAIN VIEW, KINGSBURG, CA 93631
C-722-0-1: Sep 1 2010 4:53PM - FUKUDAD

11. 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
12. 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
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. 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
21. 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
22. 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
23. 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.

24. 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
25. 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
26. 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
27. 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
28. 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
29. 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
30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
31. 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
32. 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
33. 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
34. 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
35. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
36. 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

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

37. 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
38. 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
39. 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
40. 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
41. 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
42. 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
43. On November 30, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-1-8

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

44 MMBTU/HR NATURAL GAS-FIRED ZURN BROOKS STANDBY BOILER,, S/N 100025, WITH LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) SYSTEM

PERMIT UNIT REQUIREMENTS

1. This boiler shall operate only when the turbine/generator system (C-722-2) is not operating. [District NSR Rule] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO₂, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
4. The flue gas recirculation system shall be operated whenever the boiler is in use. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of natural gas combusted in the unit shall be installed, utilized and maintained. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
6. Maximum annual heat input of the unit shall not exceed 30 billion Btu per calendar year. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
7. Consumption of natural gas shall not exceed 816,000 scf per day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The unit shall only be fired on PUC-regulated natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 30 ppmv NO_x @ 3% O₂ or 0.036 lb-NO_x/MMBtu, 0.00285 lb-SO_x/MMBtu, 0.010 lb-PM₁₀/MMBtu, 200 ppmv CO @ 3% O₂ or 0.1456 lb-CO/MMBtu, or 0.004 lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
10. The permittee shall monitor and record the stack concentration of NO_x, CO, and O₂ at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 2520, 9.3] 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. If either the NO_x or CO concentrations corrected to 3% O₂, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 2520, 9.3] Federally Enforceable Through Title V Permit
12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 2520, 9.3] Federally Enforceable Through Title V Permit
13. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 3% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 2520, 9.4] Federally Enforceable Through Title V Permit
14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
15. Source testing to measure natural gas-combustion NO_x and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. NO_x emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
20. Stack gas oxygen (O₂) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] 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.

22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rules 1081 and 2520, 9.5] Federally Enforceable Through Title V Permit
23. Permittee shall record daily natural gas consumption. Records shall be retained for at least five years and shall be made available for District inspection upon request. [District Rules 1070 and 2520, 9.4] Federally Enforceable Through Title V Permit
24. Records of monthly and annual heat input of the unit shall be maintained. [District NSR Rule and District Rules 4305, 4306, and 2520, 9.4] Federally Enforceable Through Title V Permit
25. 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 Rules 1070, 4305, 4306, and 2520, 9.4] Federally Enforceable Through Title V Permit
26. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 404 (Madera) 406 (Fresno), and 407 (all six remaining counties in the San Joaquin Valley); SJVUAPCD Rule 4801. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
27. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 4201 and 4301. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: SJVUAPCD Rule 1081. [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 requirements: SJVUAPCD Rule 4305, Sec. 4.2, 5.1.1, 5.1.2., 5.4, 6.1.1, 6.2 (excepting 6.2.3), 6.3, 8.1 and Rule 4351 Sec 4.2, 5.2.2.1, 5.2.2.2, 6.1.1, 6.2 (excepting 6.2.3), 8.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
30. The requirements of 40 CFR 72.6(b) are not applicable because this is not an affected unit under the acid rain provisions. The requirements of 40 CFR 60.40c do not apply to this source because it is not used to produce electricity for sale. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. Pursuant to Rule 4320, beginning in 2010 the operator shall pay an annual emission fee to the District for NO_x emissions from this unit for the previous calendar year. Payments are due by July 1 of each year. Payments shall continue annually until either the unit is permanently removed from service in the District or the operator demonstrates compliance with the applicable NO_x emission limit listed in Rule 4320. [District Rule 4320]
32. Permittee shall maintain records of annual heat input (MMBtu) for this unit on a calendar year basis. Such 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 Rules 1070 and Rule 4320]
33. On and after the next unit replacement but no later than January 1, 2014, the permittee shall submit an analysis showing the fuel's sulfur content at least once every year. Valid purchase contracts, supplier certifications, tariff sheets, or transportation contacts may be used to satisfy this requirement, provided they establish the fuel parameters mentioned above. [District Rule 4320]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-2-14

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH A NATURAL GAS-FIRED 110 MMBTU/HR DAVIS DUCT BURNER, SELECTIVE CATALYTIC REDUCTION, AND A HEAT RECOVERY STEAM GENERATOR UNIT

PERMIT UNIT REQUIREMENTS

1. Permit units C-722-2 and C-722-1 shall not operate simultaneously. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The gas turbine shall incorporate a 200 hp electric motor as starter engine, a fuel control module to regulate the fuel rate based on exhaust temperature and fuel output, and a steam injection system with metering and recording devices. [District NSR Rule] Federally Enforceable Through Title V Permit
3. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule, 40 CFR 60.333(b); County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County)] Federally Enforceable Through Title V Permit
4. The gas turbine natural gas fuel consumption rate shall not exceed 6,480 MMBtu per day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The duct burner natural gas fuel consumption rate shall not exceed 2,300 MMBtu per day [District Rule] Federally Enforceable Through Title V Permit
6. Permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 5.0 ppmvd NOx @ 15% O2 (based on a 3-hour rolling average with at least one sample point per 15-minute interval), 0.0029 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, 34 ppmv CO @ 15% O2, 0.023 lb-VOC/MMBtu, or 15 ppmv-ammonia @ 15% O2. [40 CFR 60.332, District NSR Rule; District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
9. During start-up and shutdown, emission rates from the gas turbine/duct burner/HRSG unit shall not exceed any of the following: 0.0029 lb-SOx/MMBtu, 0.006 lb-PM10/MMBtu, 0.023 lb-VOC/MMBtu. [District NSR Rule; and District Rule 4703, 5.1 and 5.2; and District Rule 4102] Federally Enforceable Through Title V Permit
10. Daily emissions from the gas turbine/duct burner/HRSG unit shall not exceed any of the following (including thermal stabilization periods): 149.1 lb-NOx/day, 23.4 lb-SOx/day, 37.0 lb-PM10/day, 503.7 lb-CO/day, or 147.6 lb-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The ammonia concentration shall not exceed 15 ppmv at 15% O2. The ammonia concentration limits shall not apply during startup, which is not to exceed four hours, or shutdown, which is not to exceed two hours. [District Rule 4102]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd across the catalyst corrected to 15% O2 after performing (inlet - outlet) subtraction, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip; 2.) Utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102]
13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 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
14. 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
15. Start-up is 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 operation. Shut down is defined as the period of time during which a unit 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 unit is completely turned off. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703, 5.3.1] Federally Enforceable Through Title V Permit
16. Permittee shall install, operate, and maintain in calibration a system that continuously measures and records the exhaust gas NOx and O2 concentrations. The NOx and O2 continuous emissions monitoring systems shall meet EPA requirements as specified in 40 CFR Part 60 or other systems that are acceptable to the EPA. [40 CFR 60.334(b), District Rules 2520, 9.3.2, 4102, and 4703, 6.2.3] Federally Enforceable Through Title V Permit
17. The Continuous Emissions Monitoring equipment must be linked to a data logger which is compatible with the District's Data Acquisition System. [District Rules 1080 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. All CEM 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. [District Rule 2520, 9.3.2 and 40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
19. Emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with the applicable test method, or, for continuous emission monitoring data, all applicable requirements of 40 CFR 60. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
20. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rules 1080, 6.4 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. All CEM systems shall meet the performance specification requirements (including thermal stabilization periods) 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 Rules 1080, 6.5, 6.6 and 2520, 9.3.2] 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 Rules 1080, 7.1 and 2520, 9.5.2] 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.

23. Results of CEM systems shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rules 1080, 7.2 and 2520, 9.3.2 and 60.13(h)] Federally Enforceable Through Title V Permit
24. Permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the CEM system in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rules 2520, 9.3.2 and 4703, 6.2.3] Federally Enforceable Through Title V Permit
25. Permittee shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: 1) time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; 2) 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; 3) applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and 5) a negative declaration when no excess emissions occurred. [40 CFR 60.7(c) and District Rules 1080, 8.0 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
26. A violation of the NO_x emission standard during a three hour averaging period indicated by the CEM system shall be reported to the APCO within 96 hours. [District Rules 1080, 9.0 and 2520, 9.5.2] 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. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
29. Any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
30. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
31. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
32. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x 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) 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
33. Source testing to measure ammonia shall be conducted using test method BAAQMD ST-1B. [District Rule 4102]
34. Source testing to measure the VOC emission rates (lb/hr and ppmvd @ 15% O₂) shall be conducted every twelve months. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
35. Source testing to measure the PM₁₀ emission rate (lb/MMBtu) and the ammonia emission rate (ppmv @ 15% O₂) shall be conducted once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
36. Source testing to measure volatile organic compounds (VOC) shall be conducted using EPA Method 18 or 25. [District Rule 1081] Federally Enforceable Through Title V Permit
37. 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
38. The permittee shall maintain records of the daily calculated ammonia slip measurements. [District Rule 4102]

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

39. Permittee shall maintain records of the following: 1) the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the permit unit; 2) performance testing, evaluations, calibrations, checks, adjustments, and maintenance of CEMS; and 3) emission measurements. [District Rules 1080, 7.3, 2520, 9.4.2 and 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
40. The owner or operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, and quantity and heat input of fuel used. [District Rules 2520, 9.4.2, 4703, 6.2.6] Federally Enforceable Through Title V Permit
41. 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
42. 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) and (b), 60.333 (a) and (b); 60.334(a), (g), (h), (i), and (j), and 60.335 (b), and (c); 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 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
43. 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
44. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: 40 CFR 60.42b, 43b, 44b, 46b, 48b, and 49b. A permit shield is granted from these requirements. [District Rule 2520, 13.2] 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: C-722-4-0

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

20,000 GALLON SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AN AMMONIA STORAGE TANK, METERING, INJECTION, AND RECORDING DEVICES.

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201]
2. Ammonia slip shall be monitored in the exhaust by use of a continuous monitoring system. [District Rule 1080]

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-722-5-2

EXPIRATION DATE: 04/30/2009

SECTION: 10 **TOWNSHIP:** 16S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION.

PERMIT UNIT REQUIREMENTS

1. No compound containing hexavalent chromium shall be added to the cooling tower. [District Rule 7012] Federally Enforceable Through Title V Permit
2. Owner/operator shall operate and maintain a Data Acquisition System (DAS) for the necessary information to calculate the VOC emissions as required by the approved Monitoring Plan. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. DAS shall include records of the temperature of incoming circulating water in the cooling tower on a continuous basis, averaged on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. DAS shall record the operating schedule and speed of the cooling tower fan (full-speed, half-speed) on an hourly basis. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Owner/operator shall perform weekly sampling of the cooling tower blowdown water for laboratory analysis of ethanol concentration. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Owner/operator shall maintain in good working order a flow meter that measures the total flow of raisin rinse water received from Sun-Maid facility, and flow monitoring device that measures the amount of water flowing from raw water storage to this cooling tower operation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All records shall be maintained, retained for at least five years, and made available for District inspection upon request. [District Rules 2201, 2520, 9.3.2 and 1070] Federally Enforceable Through Title V Permit
8. A report shall be submitted to the District within 30 days of the end of each calendar quarter. The report shall include average daily VOC (ethanol) emissions from the cooling tower (C-722-5), gas turbine (C-722-2), and total facility for the previous calendar quarter. The report shall also summarize total facility VOC emissions for the four calendar quarters immediately prior to the report. [District Rules 2201, 2520, 9.5.2 and 1070] Federally Enforceable Through Title V Permit
9. VOC emissions from the cooling tower operation shall not exceed 609 pounds per day averaged over a calendar quarter. [District Rule 2201] 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: C-722-6-1

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT #2)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the raisin rinsewater shall not exceed 1000 mg/L. [District NSR Rule and 4623] Federally Enforceable Through Title V Permit
5. The ethanol concentration of the raisin rinsewater for this unit shall be verified by measuring the ethanol concentration of the condensate stored in the condensate tank (C-722-9). [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emissions from this storage tank shall not exceed either of the following limits: 0.4 lb-VOC/day or 45 lb-VOC/year. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the combined daily and cumulative annual quantity of raisin rinse water delivered tanks PWT #2 and PWT #3 (C-722-6 and C-722-7). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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 NSR Rule] 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: C-722-7-1

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT#3)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The combined quantity of raisin rinse water delivered to tanks PWT #2 and PWT #3 (C-722-6 and C-722-7) shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the raisin rinsewater shall not exceed 1000 mg/L. [District NSR Rule and 4623] Federally Enforceable Through Title V Permit
5. The ethanol concentration of the raisin rinsewater for this unit shall be verified by measuring the ethanol concentration of the condensate stored in the condensate tank (C-722-9). [District NSR Rule] Federally Enforceable Through Title V Permit
6. Emissions from this storage tank shall not exceed either of the following limits: 0.4 lb-VOC/day or 45 lb-VOC/year. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the combined daily and cumulative annual quantity of raisin rinse water delivered tanks PWT #2 and PWT #3 (C-722-6 and C-722-7). [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. 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 NSR Rule] 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: C-722-8-1

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

FRUCTOSE RECLAMATION SYSTEM CONSISTING OF A 5-EFFECT EVAPORATOR, A CONDENSER, AND A PERMIT EXEMPT 25,000 GALLON CONCENTRATE STORAGE TANK (CST, STORES CONCENTRATED SUGAR WATER)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. VOC emissions from the condenser process vent shall not exceed 8.5 E-6 lb/cubic foot of exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The condenser process vent's exhaust flow rate shall not exceed 700 CFM. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Permittee shall keep a record of the daily VOC emissions from the process vent. The following calculation shall be used to determine daily emissions: Daily VOC emissions = Time Operated (Minutes) x 700 CFM x 8.5 E-6 lb/cubic foot of exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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 NSR Rule] 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: C-722-9-1

EXPIRATION DATE: 04/30/2009

EQUIPMENT DESCRIPTION:

300,000 GALLON FIXED ROOF CONDENSATE STORAGE TANK (PWT #1) AND A PERMIT EXEMPT 300,000 GALLON WELLWATER STORAGE TANK (STORES CLEAN PRODUCED WATER)

PERMIT UNIT REQUIREMENTS

1. All equipment shall be operated and maintained as recommended by the equipment manufacturer(s). [District NSR Rule] Federally Enforceable Through Title V Permit
2. The quantity of condensate delivered to this tank shall not exceed 1,084,000 gallons in any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The quantity of condensate delivered to this tank shall not exceed 100,000,000 gallons in any one year. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The ethanol concentration of the condensate shall not exceed 1000 mg/L. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Permittee shall perform monthly sampling of the condensate for laboratory analysis to determine the ethanol concentration. If six consecutive monthly samples demonstrate that the ethanol concentration is less than 900 mg/L, then the monitoring frequency shall be reduced to quarterly. If an exceedance from the 1000 mg/L limit is observed in a quarterly sample, monitoring shall revert to monthly sampling until six consecutive samples demonstrate that the ethanol content is less than 900 mg/L. [District NSR Rule] Federally Enforceable Through Title V Permit
6. EPA Method 8015 shall be used to determine the ethanol concentration of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Permittee shall keep a record of the results of the laboratory analysis of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall keep a record of cumulative annual facility-wide VOC emissions. This record shall be updated at least on a monthly basis. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall keep a record of the results of sampling of the condensate. [District NSR Rule] Federally Enforceable Through Title V Permit
10. 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 NSR Rule] Federally Enforceable Through Title V Permit

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

ATTACHMENT C

Detailed Facility List

Detailed Facility Report
For Facility=722 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

KINGSBURG COGEN FACILITY 11765 MOUNTAIN VIEW KINGSBURG, CA 93631	FAC # STATUS: TELEPHONE:	C 722 A 2098919040	TYPE: TOXIC ID:	TitleV 51615	EXPIRE ON: AREA: INSP. DATE:	04/30/2009 7 / . 08/11
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-722-1-8	44,000 kBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	44 MMBTU/HR NATURAL GAS-FIRED ZURN BROOKS STANDBY BOILER, S/N 100025, WITH LOW-NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) SYSTEM
C-722-2-14	34,500 kW	3020-08A F	1	8,171.00	8,171.00	A	34.5 MW COGENERATION FACILITY WITH GENERAL ELECTRIC MODEL LM-2500 NATURAL GAS-FIRED TURBINE ENGINE POWERING AN ELECTRICAL GENERATOR, WITH A NATURAL GAS-FIRED 110 MMBTU/HR DAVIS DUCT BURNER, SELECTIVE CATALYTIC REDUCTION, AND A HEAT RECOVERY STEAM GENERATOR UNIT
C-722-4-0	20.0 KGAL SCR	999-99	1	0.00	0.00	A	20,000 GALLON SELECTIVE CATALYTIC REDUCTION SYSTEM WITH AN AMMONIA STORAGE TANK, METERING, INJECTION, AND RECORDING DEVICES.
C-722-5-2	MISC.	999-99	1	0.00	0.00	A	ONE 15,200 GPM, MODEL TD3024-2-2024CF COOLING TOWER USED TO CONDENSE EXCESS STEAM FOR THE COGENERATION OPERATION.
C-722-6-1	300,000 gallons	3020-05 E	1	246.00	246.00	A	300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT #2)
C-722-7-1	300,000 gallons	3020-05 E	1	246.00	246.00	A	300,000 GALLON STEAM-HEATED FIXED ROOF RAISIN RINSEWATER STORAGE TANK (PWT#3)
C-722-8-1	259 HP	3020-01 E	1	412.00	412.00	A	FRUCTOSE RECLAMATION SYSTEM CONSISTING OF A 5-EFFECT EVAPORATOR, A CONDENSER, AND A PERMIT EXEMPT 25,000 GALLON CONCENTRATE STORAGE TANK (CST, STORES CONCENTRATED SUGAR WATER)
C-722-9-1	300,000 gallons	3020-05 E	1	246.00	246.00	A	300,000 GALLON FIXED ROOF CONDENSATE STORAGE TANK (PWT #1) AND A PERMIT EXEMPT 300,000 GALLON WELLWATER STORAGE TANK (STORES CLEAN PRODUCED WATER)

Number of Facilities Reported: 1

ATTACHMENT D

Template Qualification Form

Template SJV-UM-0-2

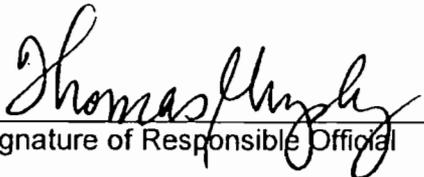
Title V General Permit Template Qualification Form
for
Facility-wide Umbrella General Permit Template

District facility ID # C-722

To use this template, remove this sheet and attach to application. The conditions outlined in this template will be placed on your Title V permit.

Any facility may use this facility-wide template as part of its Title V application.

Based on information and belief formed after reasonable inquiry: 1) the information on this form is true and correct and 2) the facility certifies compliance with this template's permit conditions.



Signature of Responsible Official

03/30/09

Date

Thomas Murphy, Vice President, PE Kingsburg LLC
Name of Responsible Official (Please Print)

ATTACHMENT E

Current District Rule SIP Comparisons

Comparison of the latest amended version (amended October 16, 2008) of District Rule 4306 and the current SIP approved version, adopted September 18, 2003

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
APPLICABILITY		
This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.	X	X
EXEMPTIONS		
<p>The requirements of this rule shall not apply to:</p> <p>Solid fuel fired units.</p> <p>Dryers and glass melting furnaces.</p> <p>Kilns and smelters where the products of combustion come into direct contact with the material to be heated.</p> <p>Unfired or fired waste heat recovery boilers that are used to recover or augment heat from the exhaust of combustion turbines or internal combustion engines.</p> <p>The requirements of Sections 5.1.1 and 5.1.2 shall not apply to a unit when burning any fuel other than PUC quality natural gas during PUC quality natural gas curtailment provided all of the following conditions are met:</p> <ul style="list-style-type: none"> • Fuels other than PUC quality natural gas are burned no more than 168 cumulative hours in a calendar year plus 48 hours per calendar year for equipment testing, as limited by Permit to Operate. • NOx emission shall not exceed 150 ppmv or 0.215 lb/MMBtu. Demonstration of compliance with this limit shall be made by either source testing, continuous emission monitoring system (CEMS), an APCO approved Alternate Monitoring System, or an APCO approved portable NOx analyzer. 	X	X
REQUIREMENTS		
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Units with a rated heat input equal to or less than 20.0 MMBtu/hour, except for Categories C, D, E, F, G, H, and I units</i></p> <p>Gaseous Fuel: 15 ppmv or 0.018 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Units with a rated heat input greater than 20.0 MMBtu/hour, except for Categories C, D, E, F, G, H, and I units</i></p> <p>Gaseous Fuel: 9 ppmv or 0.011 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Oilfield Steam Generators</i></p> <p>Gaseous Fuel: 15 ppmv or 0.018 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Refinery units with a rated heat input greater than 5 MMBtu/hr up to 65 MMBtu/hr</i></p> <p>Gaseous Fuel: 30 ppmv or 0.036 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Refinery units with a rated heat input greater than 65 MMBtu/hr up to 110 MMBtu/hr</i></p> <p>Gaseous Fuel: 25 ppmv or 0.031 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Refinery units with a rated heat input greater than 110 MMBtu/hr</i></p> <p>Gaseous Fuel: 5 ppmv or 0.0062 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Load-following units</i></p> <p>Gaseous Fuel: 15 ppmv or 0.018 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Units limited by a Permit to Operate to an annual heat input of 9 billion Btu/year to 30 billion Btu/year</i></p> <p>Gaseous Fuel: 30 ppmv or 0.036 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X
<p><i>NOx and CO Limits (Standard Option)</i></p> <p><i>Units in which the rated heat input of each burner is less than or equal to 5 MMBtu/hr but the total rated heat input of all the burners in a unit is greater than 5 MMBtu/hr, as specified in the Permit to Operate, and in which the products of combustion do not come in contact with the products of combustion of any other burner.</i></p> <p>Gaseous Fuel: 30 ppmv or 0.036 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p><i>NOx and CO Limits (Enhanced Option)</i></p> <p><i>Units with a rated heat input equal to or less than 20.0 MMBtu/hour, except for Categories C, D, E, F, G, H, and I units</i></p> <p>Gaseous Fuel: 9 ppmv or 0.011 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>		X
<p><i>NOx and CO Limits (Enhanced Option)</i></p> <p><i>Units with a rated heat input greater than 20.0 MMBtu/hour, except for Categories C, D, E, F, G, H, and I units</i></p> <p>Gaseous Fuel: 6 ppmv or 0.007 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>		X
<p><i>NOx and CO Limits (Enhanced Option)</i></p> <p><i>Load-following units</i></p> <p>Gaseous Fuel: 9 ppmv or 0.011 lb-NOx/MMBtu; 400 ppmv-CO</p> <p>Liquid Fuel: 400 ppmv or 0.052 lb-NOx/MMBtu; 400 ppmv-CO</p>		X
<p>When a unit is operated on combinations of gaseous fuel and liquid fuel, the NOx limit shall be the heat input weighted average of the applicable limits specified in Sections 5.1.1, as calculated by the following equation: $\text{WeightedAverageLimit} = \frac{(\text{NOx limit for gaseous fuel} \times G) + (\text{NOx limit for liquid fuel} \times L)}{G + L}$</p> <p>Where: G = annual heat input from gaseous fuel L = annual heat input from liquid fuel</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>each unit that is limited to less than 9 billion Btu per calendar year heat input pursuant to a Permit to Operate, the operator shall comply with the requirement of Section 7.4 and one of the following:</p> <ul style="list-style-type: none"> • tune the unit at least twice per calendar year, (from four to eight months apart) by a qualified technician in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown; or • operate the unit in a manner that maintains exhaust oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis; or • operate the unit in compliance with the applicable emission limits of Sections 5.1.1 or 5.1.2. 	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>The applicable emission limits of Sections 5.1, 5.2.2 and 5.2.3 shall not apply during start-up or shutdown provided an operator complies with the requirements specified below.</p> <ul style="list-style-type: none"> • The duration of each start-up or each shutdown shall not exceed two hours, except as provided in Section 5.3.3. • The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown. • An operator may submit an application for a Permit to Operate condition to allow more than two hours for each start-up or each shutdown provided the operator meets all of the following conditions: <ul style="list-style-type: none"> a. The maximum allowable duration of start-up or shutdown will be determined by the APCO. The allowable duration of start-up shall not exceed twelve hours and the allowable duration of shutdown shall not exceed nine hours. b. The APCO will only approve start-up or shutdown duration longer than two hours when the application clearly identifies the control technologies or strategies to be utilized; and describes what physical conditions prevail during start-up or shutdown periods that prevent the controls from being effective; and provides a reasonably precise estimate as to when the physical conditions will have reached a state that allows for the effective control of emissions. • The operator shall submit to the APCO any information deemed necessary by the APCO to determine the appropriate length of start-up or shutdown. The information shall include a detailed list of activities to be performed during start-up or shutdown and a reasonable explanation for the length of time needed to complete each activity; and a description of the material process flow rates and system operating parameters, etc., the operator plans to evaluate during the process optimization; and an explanation of how the activities and process flow affect the operation of the emissions control equipment; and basis for the requested additional duration of start-up or shutdown. 	X	X
<ul style="list-style-type: none"> ▪ <i>Permit to Operate modification solely to include start-up or shutdown conditions shall be exempt from the BACT and offset requirements of Rule 2201 (New and Modified Stationary Source Review Rule) for applications for Authority to Construct that are submitted and are approved by the APCO by the applicable "full compliance" schedule specified in Section 7.1 Table 2</i> 	X	

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<ul style="list-style-type: none"> ▪ <i>Permit to Operate (PTO) modifications solely to include start-up or shutdown conditions may be exempt from Best Available Control Technology (BACT) and emission offset requirements if the PTO modifications meet the requirements of Rule 2201 (New or Modified Stationary Source Review Rule) Section 4.2 (BACT Exemptions) and Rule 2201 Section 4.6 (Offset Exemptions).</i> 		X
MONITORING PROVISIONS		
<p><i>The operator of any unit which simultaneously fires gaseous and liquid fuels shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure.</i></p>	X	X
<p><i>The operator of any unit subject to the applicable emission limits in Sections 5.1 shall install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NO_x, CO, and oxygen, or implement an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Part 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). An APCO approved Alternate Monitoring System shall monitor one or more of the following: periodic NO_x and CO exhaust emission concentrations, periodic exhaust oxygen concentration, flow rate of reducing agent added to exhaust, catalyst inlet and exhaust temperature, catalyst inlet and exhaust oxygen concentration, periodic flue gas recirculation rate, other operational characteristics.</i></p>	X	X
<p><i>For units subject to the requirements of Section 5.2.1 or 5.2.2, the operator shall monitor, at least on a monthly basis, the operational characteristics recommended by the manufacturer and approved by the APCO.</i></p>	X	X

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<p><i>The operator of any Category H unit listed in Section 5.1.1 Table 1 and any unit subject to Section 5.2.1 or 5.2.2 shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure. A master meter, which measures fuel to all units in a group of similar units, may satisfy these requirements if approved by the APCO in writing. The cumulative annual fuel usage may be verified from utility service meters, purchase or tank fill records, or other acceptable methods, as approved by the APCO.</i></p>	X	X
<p><i>The APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits. The operator shall source test over the proposed range of surrogate operating parameters to demonstrate compliance with the applicable emission standards.</i></p>		X
COMPLIANCE DETERMINATION		
<p><i>The operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).</i></p>	X	X
<p>All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.</p>	X	
<p>All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.</p>		X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
All Continuous Emissions Monitoring System (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes to demonstrate compliance with the applicable emission limits of this rule. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule.	X	X
For emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NOx analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.	X	X
For emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.	X	X
RECORDKEEPING		
The records required by Sections 6.1.1 through 6.1.4 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.	X	X
The operator of any unit operated under the exemption of Section 4.2 shall monitor and record for each unit the cumulative annual hours of operation on each fuel other than natural gas during periods of natural gas curtailment and equipment testing. The NOx emission concentration (in ppmv or lb/MMBtu) for each unit that is operated during periods of natural gas curtailment shall be recorded. Failure to maintain records required by Section 6.1.1 or information contained in the records that demonstrates noncompliance with the conditions for exemption under Section 4.2 will result in loss of exemption status. On and after the applicable compliance schedule specified in Section 7.0, any unit losing an exemption status shall be brought into full compliance with this rule as specified in Section 7.3.	X	X

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The operator of any Category H unit listed in Section 5.1.1 Table 1 and any unit that is subject to the requirements of Section 5.2 shall record the amount of fuel use at least on a monthly basis for each unit, or for a group of units as specified in Section 5.4.4. On and after the applicable compliance schedule specified in Section 7.0, in the event that such unit exceeds the applicable annual heat input limit specified in Sections 5.1.1 Table 1 Category H and Section 5.2, the unit shall be brought into full compliance with this rule as specified in Section 7.4.	X	X
The operator of any unit subject to Section 5.2.1 or Section 6.3.1 shall maintain records to verify that the required tune-up and the required monitoring of the operational characteristics of the unit have been performed.	X	X
The operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.	X	X
TEST METHODS		
<p>The following test methods shall be used unless otherwise approved by the APCO and EPA.</p> <p>Fuel h_hv shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.</p> <p>Oxides of nitrogen (ppmv) - EPA Method 7E, or ARB Method 100.</p> <p>Carbon monoxide (ppmv) - EPA Method 10, or ARB Method 100.</p> <p>Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.</p> <p>NO_x Emission Rate (Heat Input Basis) - EPA Method 19.</p> <p>Stack gas velocities - EPA Method 2.</p> <p>Stack gas moisture content - EPA Method 4.</p>	X	X
COMPLIANCE TESTING		

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>Each unit subject to the requirements in Sections 5.1 or 5.2.3 shall be source tested to determine compliance with the applicable emission limits at least once every 12 months, (no more than 30 days before or after the required annual source test date). Units that demonstrate compliance on two consecutive 12-month source tests may defer the following 12-month source test for up to 36 months (no more than 30 days before or after the required 36-month source test date). During the 36-month source testing interval, the operator shall tune the unit in accordance with the provisions of Section 5.2.1, and shall monitor, on a monthly basis, the unit's operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits specified in Sections 5.1 or 5.2.3. Tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits specified in Sections 5.1 or 5.2.3, the source testing frequency shall revert to at least once every 12 months. Failure to comply with the requirements Section 6.3.1, or any source test results that exceed the applicable emission limits in Sections 5.1 or 5.2.3 shall constitute a violation of this rule.</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>In lieu of compliance with Section 6.3.1, compliance with the applicable emission limits in Sections 5.1 or 5.2.3 shall be demonstrated by submittal of annual emissions test results to the District from a unit or units that represents a group of units, provided All units in the group are initially source tested. The emissions from all test runs from units within the group are less than 90% of the permitted value, and the emissions do not vary greater than 25% from the average of all test runs; and all units in a group are similar in terms of rated heat input, make and series, operational conditions, fuel used, and control method. No unit with a rated heat input greater than 100 MMBtu shall be considered as part of the group; and the group is owned by a single owner and is located at a single stationary source; and selection of the representative unit(s) is approved by the APCO prior to testing; and the number of representative units source tested shall be at least 30% of the total number of units in the group. The representative tests shall rotate each year so that within three years all units in the group have been tested at least once. All units in the group shall have received the similar maintenance and tune-up procedures as the representative unit(s) as listed in the Permit to Operate. The operator shall submit to the APCO the specific maintenance procedures to be performed on each unit that will be included in the group for representative testing. Such maintenance procedures shall be specified in the Permit to Operate for units that are included in the group for representative testing. Any maintenance work on a unit which has no effect on emissions standards and which is not specified in the maintenance procedures shall be submitted to the APCO for approval before such unit can be included as part of the group for representative testing. Any unit that necessitates any maintenance work which has an effect on emission standards and is beyond the maintenance procedures identified in the Permit to Operate, shall not be included as part of the group for representative testing. The unit shall be source tested in accordance with the provisions of Section 6.3.1; and should any of the representative units exceed the required emission limits, each of the units in the group shall demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested units being in violation of this rule. After compliance with the requirements of Section 6.3.2.7 has been demonstrated, subsequent source testing shall be performed pursuant to Sections 6.3.1 or 6.3.2.</p>	X	X
EMISSION CONTROL PLAN		

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>The operator of any unit shall submit to the APCO for approval an Emissions Control Plan according to the compliance schedule in Section 7.0. For each unit, the plan shall contain the following: Permit to Operate number, fuel type and hhv, annual fuel consumption (Btu/yr), current emission level, including method used to determine emission level, and plan of actions, including a schedule of increments of progress, which will be taken to satisfy the requirements of Section 5.0 and the compliance schedule in Section 7.0.</p>	X	
<p>The operator of any unit shall submit to the APCO for approval an Emissions Control Plan according to the compliance schedule in Section 7.0. For each unit, the plan shall contain the following: Permit to Operate number, fuel type and hhv, annual fuel consumption (Btu/yr), current emission level, including method used to determine emission level, NOx limit to be satisfied, either Standard Option or Enhanced Option, and plan of actions, including a schedule of increments of progress, which will be taken to satisfy the requirements of Section 5.0 and the compliance schedule in Section 7.0.</p>		X
<p>The operator shall submit to the APCO for approval, as part of the ECP, a list of units which are to be designated as load-following units. The APCO shall only designate, as load-following, units for which the following information has been provided to demonstrate that the units qualify as load-following: technical data such as steam demand charts or other information to demonstrate the normal operational load fluctuations and requirements of the unit, technical data about the operational response range of an ultra low NOx burner system(s) operating at 9 ppmv NOx, and technical data demonstrating that the unit(s) are designed and operated to optimize the use of base-loaded units in conjunction with the load-following unit(s).</p>	X	X
CALCULATIONS		

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>All ppmv emission limits specified in Section 5.1 are referenced at dry stack gas conditions and 3.00 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.00 percent oxygen as follows:</p> $[\text{ppm NOx}]_{\text{corrected}} = \frac{17.95\%}{20.95\% - [\%O_2]_{\text{measured}}} \times [\text{ppm NOx}]_{\text{measured}}$ $[\text{ppm CO}]_{\text{corrected}} = \frac{17.95\%}{20.95\% - [\%O_2]_{\text{measured}}} \times [\text{ppm CO}]_{\text{measured}}$ <p>All pounds per million Btu NOx emission rates shall be calculated as pounds of nitrogen dioxide per million Btu of heat input (hhv).</p>	X	X
ALTERNATIVE EMISSION CONTROL		
<p>The single owner of two or more units may comply with Section 5.1 by controlling units in operation at the same stationary source, or at two contiguous stationary sources, to achieve an aggregated NOx emission factor no higher than 90 percent of the aggregated NOx emission factor limit that would result if each unit in operation were individually in compliance with the applicable NOx emission limits in Section 5.1. An operator that is subject to the AEC requirements below shall also comply with the applicable requirements of Sections 5.0, 6.0, 7.0 and 8.0.</p>	X	X
<p>A unit not subject to Section 5.1 or Section 5.2.3 is not eligible for inclusion in an AEC.</p>	X	X
<p>No unit subject to Sections 5.2.1 or 5.2.2 shall be included in an AEC.</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>Aggregated NOx emission factor limit: the sum of the NOx emissions, over seven consecutive calendar days, that would result if all units in the AECP were in compliance with the lb/MMBtu limits in Section 5.1 and operating at their actual firing rates, divided by the sum of the heat input of all units in the AECP over seven consecutive calendar days. Aggregated emission factor limit is calculated as:</p> $L_A = \frac{\sum L_i F_i}{\sum F_i}$ <p>where: L_A is the aggregated NOx emission factor limit (lb/MMBtu)</p> <p>L_i is the applicable NOx emission factor limit (lb/MMBtu) specified in Section 5.1.1 Table 1 or Section 5.1.2 for each category of unit in the AECP,</p> <p>F_i is the total heat input (hhv basis) of fuel (MMBtu) combusted in each unit during seven consecutive calendar days, and</p> <p>i identifies each unit in the AECP.</p>	X	X
<p>Aggregated NOx emission factor: the sum of the actual NOx emissions during seven consecutive calendar days from all units in the AECP, divided by the sum of the heat input of all units in the AECP during seven consecutive calendar days. The aggregated emission factor is calculated as:</p> $E_A = \frac{\sum E_i F_i}{\sum F_i}$ <p>where: E_A is the aggregated NOx emission factor (lb/MMBtu),</p> <p>E_i is the NOx emission factor (lb/MMBtu) for each unit in the AECP, established and verified by source testing, or continuous emission monitors,</p> <p>F_i is the total heat input (hhv basis) of fuel (MMBtu) combusted in each unit during seven consecutive calendar days, and</p> <p>i identifies each unit in the AECP.</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
<p>9.6.1 The AECF shall: Contain all data, records, and other information necessary to determine eligibility of the units for alternative emission control, including but not limited to a list of units subject to alternative emission control, daily average and maximum hours of utilization for each unit, rated heat input of each unit, and fuel type for each unit. Present the methodology for recordkeeping and reporting required by Sections 9.6.4 and 9.6.5. Demonstrate that the aggregated emission factor will meet the requirements of Section 9.5. Demonstrate that the schedule for achieving AECF NOx emission levels is at least as expeditious as the schedule if applicable units were to comply individually with the applicable emission levels in Section 5.1 and the increments of progress in Section 7.0.</p>	X	
<p>9.6.1 The AECF shall contain all data, records, and other information necessary to determine eligibility of the units for alternative emission control, including but not limited to a list of units subject to alternative emission control, daily average and maximum hours of utilization for each unit, rated heat input of each unit, and fuel type for each unit. Present the methodology for recordkeeping and reporting required by Sections 9.6.4 and 9.6.5. Specify which NOx limit, either Standard Option or Enhanced Option, will be satisfied by the units under the AECF. Demonstrate that the aggregated emission factor will meet the requirements of Section 9.5. Demonstrate that the schedule for achieving AECF NOx emission levels is at least as expeditious as the schedule if applicable units were to comply individually with the applicable emission levels in Section 5.1 and the increments of progress in Section 7.0.</p>		X
<p>Owners shall demonstrate APCO approval of the AECF prior to applying for a modification to said AECF.</p>	X	X
<p>In addition to the records kept pursuant to Section 6.1, the operator shall maintain records, on a daily basis, of the parameters needed to demonstrate compliance with the applicable NOx emission limits when operating under the AECF. The records shall be retained for at least five years and shall be made available to the APCO upon request. The records shall include, but are not limited to, the following: For each unit included in the AECF the owner shall maintain the following records for each day the fuel type and amount used for each unit (F_i), the actual emission factor for each unit (E_i), the total emissions for all units ($\sum E_i F_i$), the aggregated emission factor (E_A), the aggregated emission factor limit (L_A), and any other parameters needed to demonstrate daily compliance with the applicable NOx emissions when operating the units under the AECF.</p>	X	X

District Rule 4306 Requirements	Adopted September 18, 2003	Amended October 16, 2008
tifications of any violation pursuant to Section 9.5 shall include: name and location of facility, list of applicable units, cause and expected duration of exceedance, the amount of excess emissions, and proposed corrective actions and schedule.	X	X