



MAY 0 3 2010

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

Notice of Preliminary Decision - Title V Permit Renewal Re:

> District Facility # N-1027 **Project # N-1090188**

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 San Joaquin Cogen, LLC for its cogeneration facility, 17200 Murphy Parkway, Lathrop, 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,

Director of Permit Services

Attachments

C: Juscelino Siongco, Permit Services Engineer

Seved Sadredin

Executive Director/Air Pollution Control Officer





MAY 0 3 2010

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

Notice of Preliminary Decision - Title V Permit Renewal Re:

District Facility # N-1027 Project # N-1090188

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 San Joaquin Cogen, LLC for its cogeneration facility, 17200 Murphy Parkway, Lathrop, 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: Juscelino Siongco, Permit Services Engineer

Seyed Sadredin

Executive Director/Air Pollution Control Officer





MAY 0 3 2010

Douglas Halliday San Joaquin Cogen, LLC 17200 Murphy Parkway Lathrop, CA 95330

Re: Notice of Preliminary Decision - Title V Permit Renewal

> **District Facility # N-1027 Project # N-1090188**

Dear Mr. Halliday:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for San Joaquin Cogen, LLC for its cogeneration facility, 17200 Murphy Parkway, Lathrop, 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: Juscelino Siongco, Permit Services Engineer

Seyed Sadredin

Executive Director/Air Pollution Control Officer

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 San Joaquin Cogen, LLC for its cogeneration facility, 17200 Murphy Parkway, Lathrop, California.

The District's analysis of the legal and factual basis for this proposed action, project #N-1090188. is available for public inspection 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 This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation San Joaquin Cogen, LLC N-1027

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TITLE V PERMIT RENEWAL EVALUATION

Cogeneration Facility

Engineer: Juscelino Siongco

Date: April 15, 2010

Facility Number: N-1027

Facility Name: San Joaquin Cogen, LLC Mailing Address: 17200 Murphy Parkway

Lathrop, CA 95330

Contact Name: Kevin Madry

Phone: (661) 326-6770

Responsible Official: Douglas Halliday

Title: Executive Vice President

Project #: N-1090188

Deemed Complete: January 26, 2009

I. PROPOSAL

San Joaquin Cogen 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

San Joaquin Cogen is located at 17200 Murphy Parkway, Lathrop, San Joaquin County, 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 does not propose to use any model general permit templates.

V. SCOPE OF EPA AND PUBLIC REVIEW

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

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, <u>Exemptions</u>
 (amended September 21, 2006 ⇒ amended December 20, 2007)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended December 19, 2002 ⇒ amended September 21, 2006)
- District Rule 4101, <u>Visible Emissions</u>
 (amended November 15, 2001 ⇒ amended February 17, 2005)
- District Rule 4601, <u>Architectural Coatings</u>
 (amended October 31, 2001 ⇒ amended December 17, 2009)
- District Rule 4702, <u>Internal Combustion Engines-Phase 2</u> (amended April 20, 2006 ⇒ amended January 18, 2007)
- District Rule 4703, <u>Stationary Gas Turbines</u>
 (amended August 17, 2006 ⇒ amended September 20, 2007)
 - District Rule 8011, <u>General Requirements</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8021, <u>Construction</u>, <u>Demolition</u>, <u>Excavation</u>, <u>Extraction</u>, and <u>Other Earthmoving Activities</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8031, <u>Bulk Materials</u>

 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8041, <u>Carryout and Trackout</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8051, <u>Open Areas</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, <u>Paved and Unpaved Roads</u>
 (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8071, <u>Unpaved Vehicle/Equipment Traffic Areas</u>
 (adopted November 15, 2001 ⇒ amended September 16, 2004)
- 40 CFR 60, Subpart GG Standards for Performance of Stationary Gas Turbines (amended February 24, 2006)
- 40 CFR Part 63, Subpart YYYY, <u>National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines</u> (amended April 20, 2008)
- 40 CFR Part 63, Subpart ZZZZ, <u>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</u> (amended January 18, 2008)
- 40 CFR Part 82, Subpart B, <u>Stratospheric Ozone</u> (amended November 9, 2007)
- 40 CFR Part 82, Subpart F, <u>Stratospheric Ozone</u> (amended June 8, 2008)

B. Rules Not Updated

- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)

- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4701, <u>Internal Combustion Engines</u> (amended August 21, 2003)
- 40 CFR Part 60, Subpart IIII, <u>Standards of Performance for Stationary</u> Compression Ignition Internal Combustion Engines (July 11, 2006)
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u> (amended September 18, 2003)

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. District Rule 4102, Nuisance

Condition 41 of permit unit N-1027-0-2 is based on District Rule 4102 and will therefore not be discussed any further.

B. Title 17, California Code of Regulations Section 93115, <u>Airborne Toxic</u> Control Measure for Stationary Compression Ignition (CI) Engines

a. N-1027-2-2 – 185 bhp Caterpillar Model 3208 NA-210 Diesel-Fired Emergency IC Engine Powering a Firewater Pump

Conditions 4 and 7 are based on this rule and will therefore not be discussed any further.

VIII. PERMIT REQUIREMENTS

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

A. District Rule 2020 - Exemptions

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

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

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.26, 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 at this time.

C. District Rule 4101 - Visible Emissions

District Rule 4101 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101. The rule was amended in February 17, 2005.

a. N-1027-0-2 – Facility-Wide Requirements

• Condition 22 on the proposed permit assures compliance with the requirements of this rule.

D. District Rule 4601 - Architectural Coatings

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). The rule was amended in December 17, 2009. Since the following changes included in the latest rule amendment did not result in adding new requirements and/or revising current requirements in the facility-wide permit S-2010-0-2, no further evaluation is needed.

Section 2.0 – Applicability

The phrase "blends or repackages" was added to rule language to extend the applicability of rule language to facilities involved in those activities.

Section 3.0 – Definitions

Numerous definitions was added, deleted or modified in order to make the amended rule harmonize with definitions and rule requirements presented in the California Air Resources Board (ARB) Suggested Control Measures (SCM).

Section 4.0 – Exemptions

A reporting requirement was added for any architectural coating that is sold in a container with a volume of one liter or less. The exemption for architectural coatings was further defined by adding "coatings that are supplied and offered for sale" to current language, in order to make the rule consistent with the ARB SCM.

Section 5.0 – Requirements

The amended rule implements the recommended VOC limits per the ARB SCM. The following changes were as follows: 15 coating categories were eliminated, ten were added, nineteen coatings categories remained unchanged, and the VOC content limits for 19 categories were lowered.

Section 6.0 – Administrative Requirements

Section 6.1 – Labeling Requirements Labeling requirements were updated to add new labeling standards consistent with new coatings categories per the SCM.

Section 6.2 – Reporting Requirements

A new section was added to include reporting requirements per the SCM. The SCM contains a new requirement to submit sales data. Collection of this data is authorized in the California Health and Safety Code which requires submission of data to estimate emissions.

Section 6.3 – Test Methods

New sections were added to coincide with new coating categories pursuant to the ARB SCM.

Section 7.0 – Compliance Schedule

This section was updated to account for the new amendments to rule language by adding the phrase "the dates specified within the text of the rule."

Section 8.0 – Averaging Compliance Option This section was deleted in its entirety.

a. N-1027-0-2 - Facility-Wide Requirements

 Conditions 23, 24, and 25 on the proposed permit assure compliance with this rule.

E. District Rule 4702 - Internal Combustion Engines-Phase 2

This rule limits emissions of nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion (IC) engines. The rule was amended in January 18, 2007.

a. N-1027-2-2 – 185 bhp Caterpillar Model 3208 NA-210 Diesel-Fired Emergency IC Engine Powering a Firewater Pump

- Condition 1 on the current permit was removed and included as condition 22 in the facility-wide permit, N-1027-0-2.
- Conditions 3 and 4 on the current permit were replaced by conditions 5 and 6 on the proposed permit.
- Condition 6 on the current permit was included as condition 1 on the proposed permit.
- Conditions 7, 8, and 9 on the current permit were superseded by condition 4 on the proposed permit.
- Condition 10 on the current permit was included as condition 9 on the proposed permit.

F. District Rule 4703 - Stationary Gas Turbines

The rule limits oxides of nitrogen (NO_X) emissions from stationary gas turbine systems. 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. This rule was amended September 20, 2007.

- a. N-1027-1-7 48.6 MW Cogeneration Plant with a General Electric LM5000 Natural Gas-Fired Gas Turbine Engine with Steam Injection, Ammonia Injection, Selective Catalytic Reduction, and Oxidization Catalyst
 - Conditions 2, 3, 6, 7, 17, 20, 21, and 30 on the proposed permit assure compliance with the requirements of this rule.

G. District Rule 8011 - General Requirements

The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. The rule was amended in August 19, 2004.

a. N-1027-0-2 - Facility-Wide Requirements

 Conditions 29 through 34 on the proposed permit assure compliance with this rule.

H. District Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities. The rule was amended in August 19, 2004.

This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities.

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

a. N-1027-0-2 - Facility-Wide Requirements

• Condition 29 on the proposed permit assures compliance with this rule.

I. District Rule 8031 - Bulk Materials

The purpose of this rule is to limit fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials. The rule was amended in August 19, 2004.

This rule applies to the outdoor handling, storage, and transport of any bulk material.

Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in

Rule 8011. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

a. N-1027-0-2 – Facility-Wide Requirements

• Condition 30 on the proposed permit assures compliance with this rule.

J. District Rule 8041 - Carryout and Trackout

The purpose of this rule is to limit fugitive dust emissions from carryout and trackout. The rule was amended in August 19, 2004.

This rule applies to all sites that are subject to Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) where carryout or trackout has occurred or may occur.

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

a. N-1027-0-2 – Facility-Wide Requirements

 Condition 31 on the proposed permit assures compliance with this rule.

K. District Rule 8051 - Open Areas

The purpose of this rule is to limit fugitive dust emissions from open areas. The rule was amended in August 19, 2004.

This rule applies to any open area having 3.0 acres or more of disturbed surface area that has remained undeveloped, unoccupied, unused, or vacant for more than seven days.

Section 5.0 requires that whenever open areas are disturbed or vehicles are used in open areas, the owner/operator shall implement one or a combination

of control measures indicated in Table 8051-1 to comply with the conditions of a stabilized surface at all times and to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

a. N-1027-0-2 - Facility-Wide Requirements

 Condition 32 on the proposed permit assures compliance with this rule

L. District Rule 8061 - Paved and Unpaved Roads

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria. The rule was amended in August 19, 2004.

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

a. N-1027-0-2 - Facility-Wide Requirements

Condition 33 on the proposed permit assures compliance with this rule.

M. District Rule 8071 - Unpaved Vehicle/Equipment Traffic Area

The purpose of this rule is to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas by implementing control measures and design criteria. The rule was amended in September 16, 2004.

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

a. N-1027-0-2 - Facility-Wide Requirements

• Condition 34 on the proposed permit assures compliance with this rule.

N. 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines

The provisions of this subpart are applicable to all stationary gas turbines with a heat input at peak load equal to or greater than 10 million Btu per hour. Section 60.334 and 60.335 of this Subpart was amended February 24, 2006.

The amended provisions, 40 CFR 60.334(c), (e), and (f) clarify that the monitoring methods are options rather than requirements for turbines that do not use water or steam to control NO_X emissions. In addition, the introductory text of 46 CFR 60.334(j), 60.334(j)(1)(iv), and 40 CFR 60.335(b)(8) were also revised to reflect the amended provisions of 40 CFR 60.334(c), (e), and (f). Since permit unit N-1027-1-7 uses steam injection to control NO_X emissions, the amended provisions are not applicable this gas turbine.

- a. N-1027-1-7 48.6 MW Cogeneration Plant with a General Electric LM5000 Natural Gas-Fired Gas Turbine Engine with Steam Injection, Ammonia Injection, Selective Catalytic Reduction, and Oxidization Catalyst
 - Conditions 6, 15, 16, 22, 30, 31, and 33 on the proposed permit assure compliance with the requirements of this rule.

O. 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart applies to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commences construction, modify, or reconstruct their stationary CI ICE after July 11, 2005.

The facility does not have any CI ICE that is subject to this subpart.

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

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this Subpart was amended September 18, 2003.

a. N-1027-0-2 - Facility-Wide Requirements

 Condition 35 on the proposed permit assures compliance with this rule.

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

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

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

R. 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.

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

S. 40 CFR Part 64, CAM

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

- 1) the unit must have an emission limit for the pollutant;
- the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.
- a. N-1027-1-7 48.6 MW Cogeneration Plant with a General Electric LM5000 Natural Gas-Fired Gas Turbine Engine with Steam Injection, Ammonia Injection, Selective Catalytic Reduction, and Oxidization Catalyst

The permit unit has emissions limits for all five criteria pollutants (NO_X , SO_X , PM_{10} , CO, and VOC. There are no add-on controls for SO_X and PM_{10} , therefore CAM is not applicable for SO_X and PM_{10} .

Based on 40 CFR 64.2(b)(1)(vi), NO_X and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NO_X and CO. This permit unit may be subject to CAM for VOC since there is a VOC limit and it has add-on control in the form of an oxidation catalytic system. However, the precontrol VOC potential to emit is less than the major source threshold of 50,000 lb-VOC/year as shown below. Therefore, this unit is not subject to CAM.

The natural gas uncontrolled emission factor is 5.5 lb-VOC/MMscf or 0.006 lb-VOC/MMBtu (Ap-42, 1.4-2, July 1998). This unit's rating is approximately 460 MMBtu/hr (HHV).

460 MMBtu/hr x 0.006 lb-VOC/MMBtu x 8,760 hr/yr = 24,177 lb-VOC/yr

b. N-1027-2-2 – 185 bhp Caterpillar Model 3208 NA-210 Diesel-Fired Emergency IC Engine Powering a Firewater Pump

This permit unit is not subject to CAM since the it does not have add-on controls.

IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

A. Requirements Addressed by Model General Permit Templates

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

B. Obsolete Permit Shields From Existing Permit Requirements

a. N-1027-1-7 – 48.6 MW Cogeneration Plant with a General Electric LM5000 Natural Gas-Fired Gas Turbine Engine with Steam Injection, Ammonia Injection, Selective Catalytic Reduction, and Oxidization Catalyst

Condition 43 on the current permit was revised to remove the permit shield for sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6 of

District Rule 4703 (amended 4/25/02). The permit shield is obsolete since it was granted based on the previous amended version of District Rule 4703 which had been superseded by the current version (amended 9/20/07).

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

XI. ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley Air Pollution Control District

FACILITY: N-1027-0-2

EXPIRATION

FACILITY-WIDE REQUIREMENTS

- 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; San Joaquin County Rule 110] Federally Enforceable Through Title V Permit
- 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; San Joaquin County Rule 110] Federally Enforceable Through Title V Permit
- {2287} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 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
- {2289} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
- {2290} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- {2291} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 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. 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, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REDUIRE

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330 N-1027-0-2 : Apr 18 2010 9 21AM - SIONGCOJ

- {2293} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 10. {2294} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. {2295} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. {2296} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. {2297} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. {2298} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. {2299} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. {2300} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. {2301} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. {2302} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. {2303} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. {2304} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. {2305} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Ryle-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.

Facility Name: SAN JOAQUIN COGEN, LLC

17200 MURPHY PARKWAY LATHROP, CA 95330 Location: 17200 MURPH' N-1027-0-2 Apr 16 2010 9.21AM - SIONGCOU

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

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330 N-1027-0-2: Apr 16 2010 9:21AM -- SIONGCOJ Location:

- 35. {2319} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
- 36. {2320} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. {2321} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. {2322} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: San Joaquin County Rule 401 and San Joaquin County Rule 110. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, and 5.8 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere that causes a public nuisance. [District Rule 4102]
- 42. The facility shall comply with all applicable requirements of Rule 4663. [District Rule 4663] 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.

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, N-1027-0-2 Apr 16 2010 9.21AM - SIONGCOJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-1-7

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDIZATION CATALYST SERVING A 48.6 MW **COGENERATION PLANT**

PERMIT UNIT REQUIREMENTS

- Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8 (c)] Federally Enforceable Through Title V Permit
- Startup or shutdown periods is the time during which the exhaust gas is not within the normal operating temperature range. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit
- The SCR system shall have an effective catalyst volume of at least 904 cubic feet at all times. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
- The gas turbine shall be equipped with an automatic air/fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
- Emissions from the gas turbine shall not exceed any of the following limits: 80 lbs-PM10/day, 148 lbs-NOx/day as (NO2), 7 lbs-SOx/day as (SO2), 289 lbs-CO/day and 93 lbs-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- NOx emission concentrations from the gas turbine exhaust stack shall not exceed 3.8 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule; District Rule 4703, 5.1; and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
- CO emissions concentrations from the gas turbine exhaust stack shall not exceed 12 ppmy dry calculated to 15% O2. except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
- The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- Results of the CEM system shall meet all applicable requirements of CFR 60.13. [40 CFR 60.13] Federally Enforceable Through Title V Permit
- 10. NOx emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance all applicable requirements of 40 CFR Part 60. CO, PM10, VOC and SOx emissions concentrations measured for compliance shall be averaged over a 15-minute sampling period. [District Rule 1081, 4.0] Federally Enforceable Through Title V Permit

11. The ammonia slip shall not exceed 20 PPMV dry at 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330 N-1027-1-7: Apr 20 2010 8:25AM - SIONGCOJ

- 12. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
- 13. The selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 to 750 °F. The temperature of the exhaust gas leaving the catalytic oxidation reduction (COR) system shall be greater than 600 °F at all times, except during periods of startup or shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. 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. [40 CFR 60.333(b) and San Joaquin County Rule 407] Federally Enforceable Through Title V Permit
- 15. The sulfur content of each fuel source shall be documented in a current valid purchase contract, a supplier certification, tariff or transportation contract, or tested daily in accordance with the requirements of 40 CFR 60.334 (h) and (i). [40] CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
- 16. If the sulfur content of the natural gas being fired in the turbine is determined using daily testing, then ASTM D1072. D3246, D4468, or D6667 shall be used to make this determination. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
- 17. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The stack height shall be minimum of 50 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District NSR Rule; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0] Federally Enforceable Through Title V Permit
- 18. Source testing for NOx, CO, VOC and ammonia slip shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. 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. The results of each source test shall be submitted to the District within 60 days after testing day. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. {2268} The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) 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
- 21. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with CEMS for NOx, CO, and O2. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data shall be used to determine compliance with emission limits. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 22. A CEMS system shall be used to demonstrate compliance with the NOx emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [40 CFR 60.335] Federally Enforceable Through Title V Permit
- 23. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95380 N-1027-1-7 : Apr 20 2010 8:25AM - SIONGCOJ

- 24. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit
- 25. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- 26. {2250} The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
- 27. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 28. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
- 29. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NOX emissions in ppmv (corrected to 15% O2) and CO and O2 concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule, 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 30. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
- 31. Permittee shall maintain on file copies of natural gas bills. Certification of the sulfur content by the gas supplier on the Fuel Gas Tariff will be an acceptable alternative for verifying compliance with fuel sulfur limit. [40 CFR 60.334 (b); 40 CFR 60.334(h)(3); District NSR Rule; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. Operators of CEMS 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 time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; 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; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [40 CFR 60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 33. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 34. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR and COR systems. [District NSR Rule] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330

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- 35. A daily log of the hourly ammonia injection rate and of the pressure drop across the catalyst shall be maintained on the premises at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
- 36. {1711} The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 37. There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule] Federally Enforceable Through Title V Permit
- 38. The turbine shall be designed and operated at STIG (Trademark GE) conditions in accordance with manufacture's recommended operating procedures. [District NSR Rule, 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. Per the Settlement Agreement entered into as of 06/22/1989, by and between California Attorney General John Van de Kamp and San Joaquin CoGen LLC, San Joaquin CoGen LLC is required to mitigate permitted emissions of PM10 to 0 lb/day & NOx to 85 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 40. Turbine washing operation shall take place only when the turbine is off-line. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. VOC emissions from the off-line turbine wash operation shall not exceed 9.8 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 42. Records of daily amount of organic solvent used, Material Safety Data Sheet (MSDS) or product data sheet showing the name of the organic solvent, chemical composition, boiling point, and VOC content, mix ratios by volume of components added to the cleaning solvent, shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 43. Compliance with permit conditions in the Title V permit shall be deemed compliance with the 40 CFR 60.332(c), 60.333 (a) and (b); 60.334(b), (b)(1), (b)(2), (b)(3), (h)(1), (i), (j); 60.335(b)(10). 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 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). 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.

Facility Name: SAN JOAQUIN COGEN, LLC Location: 17200 MURPHY PARKWAY,L

N-1027-1-7 : Apr 20 2010 8:25AM - SIONGCOJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-2-2

EQUIPMENT DESCRIPTION:

185 HP CATERPILLAR MODEL 3208 NA-210 DIESEL FIRED EMERGENCY IC ENGINE POWERING A FIREWATER **PUMP**

PERMIT UNIT REQUIREMENTS

- NOx emissions from the engine shall not exceed 8.0 g/hp-hr, averaged over 15 consecutive minutes. [District NSR 1. Rule] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [San Joaquin County Rule 407 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems", 1998 edition. Total hours of operation for all maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rules 4701 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]
- 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 4701 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- Compliance with permit conditions in the Title V permit shall be deemed compliance with San Joaquin County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions adility-wide Permit to Operate.

Facility Name: SAN JOAQUIN COGEN, LLC

17200 MURPHY PARKWAY, LATHROP, CA 95330 Location:

1027-2-2 Apr 16 2010 9 22AM - SIONGCOJ

ATTACHMENT B

Previous Title V Operating Permit





Permit to Operate

FACILITY: N-1027 EXPIRATION DATE: 07/31/2009

LEGAL OWNER OR OPERATOR: SAN JOAQUIN COGEN, LLC MAILING ADDRESS: 2575 PARK LN - STE 200

LAFAYETTE, CO 80026-3200

FACILITY LOCATION: 17200 MURPHY PARKWAY

LATHROP, CA 95330

FACILITY DESCRIPTION: COGENERATION FACILITY

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

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

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

San Joaquin Valley Air Pollution Control District

FACILITY: N-1027-0-1 **EXPIRATION DATE: 07/31/2009**

FACILITY-WIDE REQUIREMENTS

- 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
- 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
- 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
- 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
- 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
- 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
- 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
- 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
- The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: Ocation: 17200 MURPHY PARKWAY, LATHROP, CA 95330

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. 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
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330

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- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. 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
- 26. 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
- 27. 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
- 28. 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
- 29. 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
- 30. 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
- 31. 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
- 32. 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
- 33. 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
- 34. 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**
- 35. 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

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

- 36. No air contaminant shall be released into the atmosphere that causes a public nuisance. [District Rule 4102]
- 37. The facility shall comply with all applicable requirements of Rule 4663. [District Rule 4663]
- 38. 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
- 39. 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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-1-6

EXPIRATION DATE: 07/31/2009

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDIZATION CATALYST SERVING A 48.6 MW COGENERATION PLANT

PERMIT UNIT REQUIREMENTS

- Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8 (c)] Federally Enforceable Through Title V Permit
- Startup or shutdown periods is the time during which the exhaust gas is not within the normal operating temperature range. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703, 3.25] Federally Enforceable Through Title V Permit
- The SCR system shall have an effective catalyst volume of at least 904 cubic feet at all times. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
- The gas turbine shall be equipped with an automatic air/fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
- Emissions from the gas turbine shall not exceed any of the following limits: 80 lbs-PM10/day, 148 lbs-NOx/day as (NO2), 7 lbs-SOx/day as (SO2), 289 lbs-CO/day and 93 lbs-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- NOx emission concentrations from the gas turbine exhaust stack shall not exceed 3.8 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule; District Rule 4703, 5.1; and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
- CO emissions concentrations from the gas turbine exhaust stack shall not exceed 12 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
- The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- Results of the CEM system shall meet all applicable requirements of CFR 60.13. [40 CFR 60.13] Federally Enforceable Through Title V Permit
- 10. NOx emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance all applicable requirements of 40 CFR Part 60. CO, PM10, VOC and SOx emissions concentrations measured for compliance shall be averaged over a 15-minute sampling period. [District Rule 1081, 4.0]
- 11. The ammonia slip shall not exceed 20 PPMV dry at 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit

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

Facility Name: SAN JOAQUIN COGEN, LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330 N-1027-1-8; Apr 16 2010 2.01PM - SIONGCOJ

- 12. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
- 13. The selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 to 750 °F. The temperature of the exhaust gas leaving the catalytic oxidation reduction (COR) system shall be greater than 600 °F at all times, except during periods of startup or shutdown. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. 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. [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
- 15. The sulfur content of each fuel source shall be documented in a current valid purchase contract, a supplier certification, tariff or transportation contract, or tested daily in accordance with the requirements of 40 CFR 60.334 (h) and (i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
- 16. If the sulfur content of the natural gas being fired in the turbine is determined using daily testing, then ASTM D1072, D3246, D4468, or D6667 shall be used to make this determination. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
- 17. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The stack height shall be minimum of 50 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District NSR Rule; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0] Federally Enforceable Through Title V Permit
- 18. Source testing for NOx, CO, VOC and ammonia slip shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. 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. The results of each source test shall be submitted to the District within 60 days after testing day. [District Rule 1081] Federally Enforceable Through Title V Permit
- 20. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) 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
- 21. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with CEMS for NOx, CO, and O2. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data shall be used to determine compliance with emission limits. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703; 40 CFR Part 64; 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 22. A CEMS system shall be used to demonstrate compliance with the NOx emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [40 CFR 60.335] Federally Enforceable Through Title V Permit
- 23. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

- 24. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit
- 25. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- 26. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
- 27. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 28. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2; 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 29. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NOX emissions in ppmv (corrected to 15% O2) and CO and O2 concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule; CFR 60.486 (b), (c), & (d); 40 CFR Part 64; 40] Federally Enforceable Through Title V Permit
- 30. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b); 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. Permittee shall maintain on file copies of natural gas bills. Certification of the sulfur content by the gas supplier on the Fuel Gas Tariff will be an acceptable alternative for verifying compliance with fuel sulfur limit. [40 CFR 60.334 (b); 40 CFR 60.334(h)(3); District NSR Rule; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. Operators of CEMS 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 time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; 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; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 33. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 34. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR and COR systems. [District NSR Rule] Federally Enforceable Through Title V Permit

- 35. A daily log of the hourly ammonia injection rate and of the pressure drop across the catalyst shall be maintained on the premises at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
- 36. The requirements of 40 CFR 72.6 (b) (Acid Rain Provisions) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 37. There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule] Federally Enforceable Through Title V Permit
- 38. The turbine shall be designed and operated at STIG (Trademark GE) conditions in accordance with manufacture's recommended operating procedures. [District NSR Rule, 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 39. Per the Settlement Agreement entered into as of 06/22/1989, by and between California Attorney General John Van de Kamp and San Joaquin CoGen LLC, San Joaquin CoGen LLC is required to mitigate permitted emissions of PM10 to 0 lb/day & NOx to 85 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 40. Turbine washing operation shall take place only when the turbine is off-line. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. VOC emissions from the off-line turbine wash operation shall not exceed 9.8 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 42. Records of daily amount of organic solvent used, Material Safety Data Sheet (MSDS) or product data sheet showing the name of the organic solvent, chemical composition, boiling point, and VOC content, mix ratios by volume of components added to the cleaning solvent, shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070] 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 60.332(c), 60.333 (a) and (b); 60.334(b), (b)(1), (b)(2), (b)(3), (h)(1), (i), (j); 60.335(b)(10); and District Rule 4703 (as amended 4/25/02), Sections 5.1.1, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 44. 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). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

N-1027-1-6; Apr 16 2010 2:01PM - SIONGCOJ

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-2-1

EXPIRATION DATE: 07/31/2009

EQUIPMENT DESCRIPTION:

185 HP CATERPILLAR MODEL 3208 NA-210 DIESEL FIRED EMERGENCY IC ENGINE POWERING A FIREWATER **PUMP**

PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101, 5.1] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing and required regulatory purposes shall not exceed 200 hours per year. [District Rules 4701, 4.2.1] Federally Enforceable Through Title V Permit
- The permittee shall maintain records of hours of emergency and non-emergency operation. Records shall include the date, the number of hours of operation, the purpose of the operation (e.g., load testing, weekly testing, rolling blackout, general area power outage, etc.), and the sulfur content of the diesel fuel used. Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rule 1070 and Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
- NOx emissions from the engine shall not exceed 8.0 g/hp-hr, averaged over 15 consecutive minutes. [District NSR Rule] Federally Enforceable Through Title V Permit
- Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [County Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus)] Federally Enforceable Through Title V Permit
- If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. 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). 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.

Facility Name: SAN JOAQUIN COGEN. LLC

Location: 17200 MURPHY PARKWAY, LATHROP, CA 95330 N-1027-2-1 Apr 18 2010 2:01PM - SIONGCOJ Location:

ATTACHMENT C

Detailed Facility List

SJVUAPCD NORTHERN

Detailed Facility Report
For Facility=1027 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

4/16/10 1:59 pm

SAN JOAQUIN COGEN, LLC 17200 MURPHY PARKWAY LATHROP, CA 95330		FAC # STATUS: TELEPHONE:		N 1027 A (701) 221-6462		TOXIC ID: 21108 AREA: 27	7/31/2009 / 3/10	
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION	
N-1027-1-6	48,600 Kilowatts	3020-08A G	1	10,215.00	10,215.00	. A	GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TU ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SE CATALYTIC REDUCTION, AND AN OXIDIZATION CATALYST A 48.6 MW COGENERATION PLANT	ELECTIVE
N-1027-2-1	185 HP	3020-10 B	1	117.00	117.00	Α	185 HP CATERPILLAR MODEL 3208 NA-210 DIESEL FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP	

Number of Facilities Reported: 1