



**DEC 23 2011**

Jane Yura  
Pacific Gas and Electric  
3401 Crow Canyon Road  
San Ramon, CA 94583

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # C-0904  
Project # C-1073726**

Dear Ms. Yura:

The District has issued the Final Renewed Title V Permit for Pacific Gas and Electric. The preliminary decision for this project was made on October 19, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the renewed permit.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

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

Sincerely,



David Warner  
Director of Permit Services

Attachments

cc: Don Ctibor, Permit Services Engineer

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

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

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

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



DEC 23 2011

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

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # C-0904  
Project # C-1073726**

Dear Mr. Rios:

The District has issued the Final Renewed Title V Permit for Pacific Gas and Electric. The preliminary decision for this project was made on October 19, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the renewed permit.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

I would like to thank you and your staff for working with us. We appreciate your concurrence with this action. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

Attachments

cc: Don Ctibor, Permit Services Engineer

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Executive Director/Air Pollution Control Officer

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DEC 23 2011

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

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # C-0904  
Project # C-1073726**

Dear Mr. Tollstrup:

The District has issued the Final Renewed Title V Permit for Pacific Gas and Electric. The preliminary decision for this project was made on October 19, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the renewed permit.

The public notice for issuance of the Final Renewed Title V Permit will be published approximately three days from the date of this letter.

I would like to thank you and your staff for working with us. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

Attachments

cc: Don Ctibor, Permit Services Engineer

Seyed Sadredin  
Executive Director/Air Pollution Control Officer

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Hanford Sentinel

**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT  
NOTICE OF FINAL DECISION TO ISSUE  
RENEWED FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue the renewed Federally Mandated Operating Permit to Pacific Gas and Electric for its compressor station located at 34453 Plymouth Avenue, Avenal, California, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1073726, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. For additional information regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

PG&E's Kettleman Compressor Station  
Facility ID: C-904  
Project #: C-1073726  
Title V Permit Renewal

## **Facility Comments**

### **Comment 1:**

There is a typo in condition 38 of C-904-0-3; the word "permits" should be "permit".

#### **District Response:**

The District has changed the word "permits" to "permit" in condition 38 of permit C-904-0-3

### **Comment 2:**

Remove this permit (C-904-22-3) for the gasoline tank. The tank was permanently removed in 2007 and was not replaced.

#### **District Response:**

The District has terminated the requested permit (C-904-22-3).

### **Comment 3:**

Remove options 2 and 3 from condition 25. PG&E has selected and is using option 1. (C-904-27-2, -28-2, -29-2)

#### **District Response:**

These conditions containing options 2 and 3 have been modified to only contain the selected option one.

### **Comment 4:**

Correct the horse power rating in the "Equipment Description" from 414 HP to 791 HP. See attached memo from air district which specifies that the correction was incorporated into the Title V permit in 2009.

#### **District Response:**

The equipment description for permit for C-904-31-3 has been changed from 414 HP to 791 HP.



# Permit to Operate

**FACILITY:** C-904

**EXPIRATION DATE:** 11/30/2016

**LEGAL OWNER OR OPERATOR:**

PG & E CO -KETTLEMAN COMPRESSOR STATION

**MAILING ADDRESS:**

ATTN: AIR QUALITY PERMITS

P O BOX 7640

SAN FRANCISCO, CA 94120

**FACILITY LOCATION:**

34453 PLYMOUTH AVE

AVENAL, CA 93204

**FACILITY DESCRIPTION:**

PUBLIC UTILITY

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: C-904-0-3

EXPIRATION DATE: 11/30/2016

## FACILITY-WIDE REQUIREMENTS

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1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. 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: PG & E CO -KETTLEMAN COMPRESSOR STATION

Location: 34453 PLYMOUTH AVE, AVENAL, CA 93204

C-904-0-3 : Dec 22 2011 7:44AM - CTIBDRD

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 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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



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 Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
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. 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. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
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36. 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. 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. 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 permit 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: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
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 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 12 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-904-27-2

**EXPIRATION DATE:** 11/30/2016

**EQUIPMENT DESCRIPTION:**

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-1) WITH SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, DRIVING NATURAL GAS PIPELINE COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to the unit's emission control systems to reach full operation. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
4. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub> or 0.6203 lb-NO<sub>x</sub>/MMBtu. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, emission rates shall not exceed any of the following emission limits: 8 ppmv NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, 0.00280 lb SO<sub>x</sub>/MMBtu, 0.3 lb PM<sub>10</sub>/hr, 50 ppmv CO @ 15% O<sub>2</sub>, 25 ppmv VOC @ 15% O<sub>2</sub>. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
6. Maximum emissions from the gas turbine, including both steady state and non-steady state periods, shall not exceed any of the following limits: 109.9 lb-NO<sub>x</sub>/day, 3.9 lb-SO<sub>x</sub>/day, 7.3 lb-PM<sub>10</sub>/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total duration of startup and shutdown shall not exceed two hours per day. During startup, the emissions control system shall be in operations and emissions shall be minimized insofar as technologically feasible. [District Rules 2201, and 4703] Federally Enforceable Through Title V Permit
8. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, or 150 ppmvd SO<sub>x</sub> (as SO<sub>2</sub>) @ 15% O<sub>2</sub>. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
9. The ammonia slip (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Source testing to determine compliance with the NO<sub>x</sub>, CO, and ammonia (NH<sub>3</sub>) steady state emission rates (in both lb/hr and ppmvd @ 15% O<sub>2</sub>) shall be conducted at least once every 12 months. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by a CARB certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, Sections 5.0, 6.0 and 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, Section 7.3] Federally Enforceable Through Title V Permit
14. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit
15. NOx emissions (ppmv) shall be determined by EPA Methods 7E or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
16. CO emissions (ppmv) shall be determined by EPA Methods 10 or 10B, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
17. Oxygen content of exhaust gas shall be determined by EPA Methods 3, 3A or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
19. PM10 emissions shall be determined by EPA Methods 201A and 202 when PM10 is required by the District. Alternate test methods that are more suitable for the exhaust stack temperature may be used if such methods are approved by the District [District Rule 2201] Federally Enforceable Through Title V Permit
20. Demonstrated percent efficiency shall be determined using the procedures contained in District Rule 4703, Section 6.4.6. [District Rule 4703, Section 6.4.6] Federally Enforceable Through Title V Permit
21. Unit shall be fired exclusively on PUC-quality natural gas, with a maximum sulfur content of 1.0 gr/100 scf. [District Rules 2201, 4801 and 40 CFR 60.333] Federally Enforceable Through Title V Permit
22. The sulfur content of each fuel source shall either be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract, or (ii) monitored within 60 days of the end of the source test and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six-month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [District Rule 2201 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
23. Fuel sulfur content shall be determined using the following methods: ASTM D 1072, D 3031, D 4084, or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
24. The facility shall maintain the following records on a daily basis: the start time, stop time, length and reason for reduced load periods, and total hours of operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with the ammonia emission limits shall be demonstrated utilizing the following procedures: calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, ammonia (NH3), and O2 weekly. If compliance with the NOx emissions is demonstrated for eight (8) consecutive weeks, then the monitoring frequency will be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until 8 consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. Ammonia monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall be performed within one (1) day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the gas turbine, the fuel consumption, and the exhaust gas NO<sub>x</sub> and O<sub>2</sub> concentrations. [District Rule 4703 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
28. The permittee shall maintain the following records: fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitoring measurements, calculated ammonia slip (lb/hr or ppmvd @ 15% O<sub>2</sub>), and calculated NO<sub>x</sub> mass emission rates (lb/hr and lb/twelve month rolling period). The calculations used to determine ammonia slip and the NO<sub>x</sub> mass emission rates shall be derived during the initial source test. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
29. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing; evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201, and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
30. All records of required monitoring data and support information shall be maintained and retained on-site for a period of at least (5) five years and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4703] Federally Enforceable Through Title V Permit
31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Kings County Rule 404, District Rule 4801 and Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, Section 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-904-28-2

**EXPIRATION DATE:** 11/30/2016

**EQUIPMENT DESCRIPTION:**

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-2) WITH SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, DRIVING NATURAL GAS PIPELINE COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to the unit's emission control systems to reach full operation. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
4. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub> or 0.6203 lb-NO<sub>x</sub>/MMBtu. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, emission rates shall not exceed any of the following emission limits: 8 ppmv NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, 0.00280 lb SO<sub>x</sub>/MMBtu, 0.3 lb PM<sub>10</sub>/hr, 50 ppmv CO @ 15% O<sub>2</sub>, 25 ppmv VOC @ 15% O<sub>2</sub>. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
6. Maximum emissions from the gas turbine, including both steady state and non-steady state periods, shall not exceed any of the following limits: 109.9 lb-NO<sub>x</sub>/day, 3.9 lb-SO<sub>x</sub>/day, 7.3 lb-PM<sub>10</sub>/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total duration of startup and shutdown shall not exceed two hours per day. During startup, the emissions control system shall be in operations and emissions shall be minimized insofar as technologically feasible. [District Rules 2201, and 4703] Federally Enforceable Through Title V Permit
8. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, or 150 ppmvd SO<sub>x</sub> (as SO<sub>2</sub>) @ 15% O<sub>2</sub>. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
9. The ammonia slip (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Source testing to determine compliance with the NO<sub>x</sub>, CO, and ammonia (NH<sub>3</sub>) steady state emission rates (in both lb/hr and ppmvd @ 15% O<sub>2</sub>) shall be conducted at least once every 12 months. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by a CARB certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, Sections 5.0, 6.0 and 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, Section 7.3] Federally Enforceable Through Title V Permit
14. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit
15. NOx emissions (ppmv) shall be determined by EPA Methods 7E or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
16. CO emissions (ppmv) shall be determined by EPA Methods 10 or 10B, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
17. Oxygen content of exhaust gas shall be determined by EPA Methods 3, 3A or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
19. PM10 emissions shall be determined by EPA Methods 201A and 202 when PM10 is required by the District. Alternate test methods that are more suitable for the exhaust stack temperature may be used if such methods are approved by the District [District Rule 2201] Federally Enforceable Through Title V Permit
20. Demonstrated percent efficiency shall be determined using the procedures contained in District Rule 4703, Section 6.4.6. [District Rule 4703, Section 6.4.6] Federally Enforceable Through Title V Permit
21. Unit shall be fired exclusively on PUC-quality natural gas, with a maximum sulfur content of 1.0 gr/100 scf. [District Rules 2201, 4801 and 40 CFR 60.333] Federally Enforceable Through Title V Permit
22. The sulfur content of each fuel source shall either be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract, or (ii) monitored within 60 days of the end of the source test and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six-month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [District Rule 2201 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
23. Fuel sulfur content shall be determined using the following methods: ASTM D 1072, D 3031, D 4084, or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
24. The facility shall maintain the following records on a daily basis: the start time, stop time, length and reason for reduced load periods, and total hours of operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with the ammonia emission limits shall be demonstrated utilizing the following procedures: calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, ammonia (NH3), and O2 weekly. If compliance with the NOx emissions is demonstrated for eight (8) consecutive weeks, then the monitoring frequency will be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until 8 consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. NOx, CO and O2 monitoring shall be conducted utilizing a portable analyzer that meets District specifications. Ammonia monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall be performed within one (1) day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the gas turbine, the fuel consumption, and the exhaust gas NO<sub>x</sub> and O<sub>2</sub> concentrations. [District Rule 4703 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
28. The permittee shall maintain the following records: fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitoring measurements, calculated ammonia slip (lb/hr or ppmvd @ 15% O<sub>2</sub>), and calculated NO<sub>x</sub> mass emission rates (lb/hr and lb/twelve month rolling period). The calculations used to determine ammonia slip and the NO<sub>x</sub> mass emission rates shall be derived during the initial source test. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
29. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing; evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201, and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
30. All records of required monitoring data and support information shall be maintained and retained on-site for a period of at least (5) five years and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4703] Federally Enforceable Through Title V Permit
31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Kings County Rule 404, District Rule 4801 and Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, Section 13.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-904-29-2

**EXPIRATION DATE:** 11/30/2016

**EQUIPMENT DESCRIPTION:**

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-3) WITH SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, DRIVING NATURAL GAS PIPELINE COMPRESSOR

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to the unit's emission control systems to reach full operation. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
4. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub> or 0.6203 lb-NO<sub>x</sub>/MMBtu. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
5. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, emission rates shall not exceed any of the following emission limits: 8 ppmv NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, 0.0028 lb SO<sub>x</sub>/MMBtu, 0.3 lb PM<sub>10</sub>/hr, 50 ppmv CO @ 15% O<sub>2</sub>, 25 ppmv VOC @ 15% O<sub>2</sub>. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
6. Maximum emissions from the gas turbine, including both steady state and non-steady state periods, shall not exceed any of the following limits: 109.9 lb-NO<sub>x</sub>/day, 3.9 lb-SO<sub>x</sub>/day, 7.3 lb-PM<sub>10</sub>/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total duration of startup and shutdown shall not exceed two hours per day. During startup, the emissions control system shall be in operations and emissions shall be minimized insofar as technologically feasible. [District Rules 2201, and 4703] Federally Enforceable Through Title V Permit
8. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NO<sub>x</sub> (as NO<sub>2</sub>) @ 15% O<sub>2</sub>, or 150 ppmvd SO<sub>x</sub> (as SO<sub>2</sub>) @ 15% O<sub>2</sub>. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
9. The ammonia slip (NH<sub>3</sub>) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O<sub>2</sub>. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Source testing to determine compliance with the NO<sub>x</sub>, CO, and ammonia (NH<sub>3</sub>) steady state emission rates (in both lb/hr and ppmvd @ 15% O<sub>2</sub>) shall be conducted at least once every 12 months. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
11. Source testing shall be by District witnessed, or authorized, sample collection by a CARB certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, Sections 5.0, 6.0 and 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, Section 7.3] Federally Enforceable Through Title V Permit
14. HHV and LHV of the fuel shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a),(b)] Federally Enforceable Through Title V Permit
15. NO<sub>x</sub> emissions (ppmv) shall be determined by EPA Methods 7E or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
16. CO emissions (ppmv) shall be determined by EPA Methods 10 or 10B, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
17. Oxygen content of exhaust gas shall be determined by EPA Methods 3, 3A or 20, or CARB Method 100. [District Rule 4703 and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
18. Source testing for ammonia slip shall be conducted utilizing BAAQMD Method ST-1B. [District Rule 1081] Federally Enforceable Through Title V Permit
19. PM<sub>10</sub> emissions shall be determined by EPA Methods 201A and 202 when PM<sub>10</sub> is required by the District. Alternate test methods that are more suitable for the exhaust stack temperature may be used if such methods are approved by the District [District Rule 2201] Federally Enforceable Through Title V Permit
20. Demonstrated percent efficiency shall be determined using the procedures contained in District Rule 4703, Section 6.4.6. [District Rule 4703, Section 6.4.6] Federally Enforceable Through Title V Permit
21. Unit shall be fired exclusively on PUC-quality natural gas, with a maximum sulfur content of 1.0 gr/100 scf. [District Rules 2201, 4801 and 40 CFR 60.333] Federally Enforceable Through Title V Permit
22. The sulfur content of each fuel source shall either be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract, or (ii) monitored within 60 days of the end of the source test and weekly thereafter. If the sulfur content is demonstrated to be less than 1.0 gr/100 scf for eight consecutive weeks, then the monitoring frequency shall be every six months. If the result of any six-month monitoring demonstrates that the fuel does not meet the fuel sulfur content limit, weekly monitoring shall resume. [District Rule 2201 and 40 CFR 60.334(b)(2)] Federally Enforceable Through Title V Permit
23. Fuel sulfur content shall be determined using the following methods: ASTM D 1072, D 3031, D 4084, or D 3246. [40 CFR 60.335(d)] Federally Enforceable Through Title V Permit
24. The facility shall maintain the following records on a daily basis: the start time, stop time, length and reason for reduced load periods, and total hours of operation. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
25. Compliance with the ammonia emission limits shall be demonstrated utilizing the following procedures: calculate the daily ammonia emissions using the following equation:  $(\text{ppmvd @ 15\% O}_2) = ((a - (b \times c / 1,000,000)) \times (1,000,000 / b)) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NO<sub>x</sub> concentration ppmvd @ 15% O<sub>2</sub> across the catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. The permittee shall monitor and record the stack concentration of NO<sub>x</sub> (as NO<sub>2</sub>), CO, ammonia (NH<sub>3</sub>), and O<sub>2</sub> weekly. If compliance with the NO<sub>x</sub> emissions is demonstrated for eight (8) consecutive weeks, then the monitoring frequency will be reduced to monthly. If deviations are observed in two consecutive months, monitoring shall revert to weekly until 8 consecutive weeks show no deviations. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. NO<sub>x</sub>, CO and O<sub>2</sub> monitoring shall be conducted utilizing a portable analyzer that meets District specifications. Ammonia monitoring shall be conducted utilizing Draeger tubes or a District approved equivalent method. Monitoring shall be performed within one (1) day of restarting the unit unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the week if on a weekly monitoring schedule. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the gas turbine, the fuel consumption, and the exhaust gas NO<sub>x</sub> and O<sub>2</sub> concentrations. [District Rule 4703 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
28. The permittee shall maintain the following records: fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitoring measurements, calculated ammonia slip (lb/hr or ppmvd @ 15% O<sub>2</sub>), and calculated NO<sub>x</sub> mass emission rates (lb/hr and lb/twelve month rolling period). The calculations used to determine ammonia slip and the NO<sub>x</sub> mass emission rates shall be derived during the initial source test. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
29. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing; evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 1080, 2201, and 4703 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
30. All records of required monitoring data and support information shall be maintained and retained on-site for a period of at least (5) five years and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4703] Federally Enforceable Through Title V Permit
31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Kings County Rule 404, District Rule 4801 and Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, Section 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-904-31-3

**EXPIRATION DATE:** 11/30/2016

**EQUIPMENT DESCRIPTION:**

791 BHP CATERPILLAR MODEL G3512TA RICH-BURN NATURAL GAS-FIRED EMERGENCY STANDBY IC ENGINE WITH NON-SELECTIVE CATALYTIC REDUCTION (NSCR) POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [Rule 4102]
2. Unit shall be fired exclusively on PUC-quality natural gas, with a maximum sulfur content of 1.0 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
3. 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, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. 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 Rules 1070, 4702 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
4. The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance and testing purposes shall not exceed 100 hours per year. [District NSR Rule and District Rule 4702] Federally Enforceable Through Title V Permit
5. Emissions shall not exceed 0.33 g NOx/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The engine shall be equipped with an operational catalytic converter installed on the exhaust outlet. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
9. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
10. If the IC engine is fired on PUC-regulated natural gas, then maintain on file copies of fuel bills or equivalent documentation. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. If the engine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the IC engine shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

12. If the engine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4201, Kings County Rule 404, District Rule 4801 and Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520, Section 13.2] Federally Enforceable Through Title V Permit

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