



FEB 0 5 2018

Mr. Rolando Trevino Pacific Gas and Electric Company Attn: Air Permits; PO Box 7640 San Francisco, CA 94120

Notice of Final Action - Title V Permit Renewal Re:

> Facility Number: C-904 **Project Number: C-1161601**

Dear Mr. Trevino:

The District has issued the Final Renewed Title V Permit for Pacific Gas and Electric Company (see enclosure). The preliminary decision for this project was made on November 16, 2017. No comments were received subsequent to the District preliminary decision.

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

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

Sincerely,

Arnaud Marjollet

Director of Permit Services

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Enclosures

Tung Le, CARB (w/enclosure) via email CC:

Gerardo C. Rios, EPA (w/enclosure) via email CC:

> Seyed Sadredin Executive Director/Air Pollution Control Officer





Facility # C-904 PG & E CO -KETTLEMAN COMPRESSOR STATION ATTN: AIR QUALITY PERMITS PO BOX 7640 SAN FRANCISCO, CA 94120

Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:

(209) 557-6446

Fresno:

(559) 230-5888

Bakersfield:

(661) 392-5665

*Failure to comply with the permit unit requirements may result in enforcement action.

Seyed Sadredin

Executive Director/Air Pollution Control Officer

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

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

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





Permit to Operate

FACILITY: C-904

EXPIRATION DATE: 11/30/2022

LEGAL OWNER OR OPERATOR:

PG & E CO -KETTLEMAN COMPRESSOR STATION

MAILING ADDRESS:

ATTN: AIR QUALITY PERMITS

PO 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.



Arnaud Marjollet
Director of Permit Services

FACILITY: C-904-0-4 **EXPIRATION DATE:** 11/30/2022

FACILITY-WIDE REQUIREMENTS

- 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, 9.8.1 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 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

- 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 Rules 8011 and 8021] 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 Rules 8011 and 8031] 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 Rules 8011 and 8041] 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 Rules 8011 and 8051] 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 Rules 8011 and 8061] 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 Rules 8011 and 8071] 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

- 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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT: C-904-27-10

EXPIRATION DATE: 11/30/2022

EQUIPMENT DESCRIPTION:

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-1) SERVED BY A SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, NOX AND O2 ANALYZERS, DRIVING A NATURAL GAS PIPELINE COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. 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
- 3. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, steady state emission rates shall not exceed any of the following emission limits: 8 ppmv NOx (as NO2) @ 15% O2, 0.00280 lb SOx/MMBtu, 0.3 lb PM10/hr, 50 ppmv CO @ 15% O2, 25 ppmv VOC @ 15% O2. All emission rates are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 4. 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-NOx/day, 3.9 lb-SOx/day, 7.3 lb-PM10/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NOx @ 15% O2 or 0.6203 lb-NOx/MMBtu, based on a per event average. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 6. The total duration of startup and shutdown shall not exceed two hours per day. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 7. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown; however, during such periods, the steady state emission factors stated in this permit shall not apply. [District Rule 4703] Federally Enforceable Through Title V Permit
- 8. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full 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
- 9. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NOx (as NO2) @ 15% O2, or 150 ppmvd SOx (as SO2) @ 15% O2. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
- 10. The ammonia slip (NH3) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O2 over a 3 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

- 11. Source testing to determine compliance with the NOx, CO, and ammonia (NH3) steady state emission rates (in both lb/hr and ppmvd @ 15% O2) shall be conducted at least once every 12 months. To ensure accuracy of the ammonia slip calculation specified within this permit, the NOx emission concentration at the SCR inlet shall be determined at the facility's typical operating load during annual compliance testing by measuring NOx emissions for a minimum of 10 minutes or until NOx concentration has stabilized. [District Rules 2201, 4102, and 4703, and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
- 12. Source testing shall be District witnessed, or authorized, and samples shall be collected by a California Air Resources Board certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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
- 15. The following test methods shall be used: NOx EPA Method 7E or 20 or CARB Method 100; CO EPA Method 10 or 10B or CARB Method 100; ammonia BAAQMD ST-1B; and O2 EPA Method 3, 3A, or 20, or CARB Method 100. Alternative test methods may also be used to satisfy the source testing requirements of this permit if approved by the District and EPA. [District Rules 1081 and 4703, and 40 CFR 60.335] Federally Enforceable Through Title V Permit
- 16. 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
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The permittee shall monitor and record the stack concentration of NOx and O2 at least once per day with the in-stack monitoring system. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. The permittee shall perform NOx and O2 accuracy drift checks of the in-stack monitoring system, when the unit is operating, at least once per day in accordance with the requirements of 40 CFR Part 60, Appendices B and F. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. During times when the in-stack monitoring system is down for maintenance or repairs, the permittee shall use a District approved portable analyzer to record daily NOx and O2 concentration readings. The permittee shall maintain records of the portable analyzer readings and include the date(s) and reasons the in-stack monitoring system was not operational. [District Rule 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 22. If the monitored NOx concentrations, as measured by the in-stack monitoring system, exceed the permitted emission limits, the permittee shall return the NOx concentrations to the permitted emission limits as soon as possible but no longer than eight (8) operating hours after detection. If the permittee's monitoring system readings continue to exceed the permitted emissions limits after eight (8) operating hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with the permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been reestablished, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. All in-stack monitoring system emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 24. Compliance with the ammonia slip emission limit shall be demonstrated at least once per day, concurrently with the instack analyzer NOx concentration readings, utilizing the following calculation: (ppmvd @ 15% O2) = ((a (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% 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
- 25. 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, and fuel consumption. [District Rule 4703] Federally Enforceable Through Title V Permit
- 26. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
- 27. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64.8] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the record keeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64.9] 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 2201 and 4703, and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 30. 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% O2), and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) a description of any corrective action taken to maintain the emissions within the acceptable range, and (6) the calculated ammonia slip values and each parameter used to perform the calculation. [District Rules 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. 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

33. 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

PERMIT UNIT: C-904-28-10

EXPIRATION DATE: 11/30/2022

EQUIPMENT DESCRIPTION:

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-2) SERVED BY A SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, NOX AND O2 ANALYZERS, DRIVING A NATURAL GAS PIPELINE COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. 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
- 3. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, steady state emission rates shall not exceed any of the following emission limits: 8 ppmv NOx (as NO2) @ 15% O2, 0.00280 lb SOx/MMBtu, 0.3 lb PM10/hr, 50 ppmv CO @ 15% O2, 25 ppmv VOC @ 15% O2. All emission rates are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 4. 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-NOx/day, 3.9 lb-SOx/day, 7.3 lb-PM10/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NOx @ 15% O2 or 0.6203 lb-NOx/MMBtu, based on a per event average. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 6. The total duration of startup and shutdown shall not exceed two hours per day. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 7. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown; however, during such periods, the steady state emission factors stated in this permit shall not apply. [District Rule 4703] Federally Enforceable Through Title V Permit
- 8. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full 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
- 9. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NOx (as NO2) @ 15% O2, or 150 ppmvd SOx (as SO2) @ 15% O2. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
- 10. The ammonia slip (NH3) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O2 over a 3 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

- 11. Source testing to determine compliance with the NOx, CO, and ammonia (NH3) steady state emission rates (in both lb/hr and ppmvd @ 15% O2) shall be conducted at least once every 12 months. To ensure accuracy of the ammonia slip calculation specified within this permit, the NOx emission concentration at the SCR inlet shall be determined at the facility's typical operating load during annual compliance testing by measuring NOx emissions for a minimum of 10 minutes or until NOx concentration has stabilized. [District Rules 2201, 4102, and 4703, and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
- 12. Source testing shall be District witnessed, or authorized, and samples shall be collected by a California Air Resources Board certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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
- 15. The following test methods shall be used: NOx EPA Method 7E or 20 or CARB Method 100; CO EPA Method 10 or 10B or CARB Method 100; ammonia BAAQMD ST-1B; and O2 EPA Method 3, 3A, or 20, or CARB Method 100. Alternative test methods may also be used to satisfy the source testing requirements of this permit if approved by the District and EPA. [District Rules 1081 and 4703, and 40 CFR 60.335] Federally Enforceable Through Title V Permit
- 16. 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
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The permittee shall monitor and record the stack concentration of NOx and O2 at least once per day with the in-stack monitoring system. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. The permittee shall perform NOx and O2 accuracy drift checks of the in-stack monitoring system, when the unit is operating, at least once per day in accordance with the requirements of 40 CFR Part 60, Appendices B and F. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. During times when the in-stack monitoring system is down for maintenance or repairs, the permittee shall use a District approved portable analyzer to record daily NOx and O2 concentration readings. The permittee shall maintain records of the portable analyzer readings and include the date(s) and reasons the in-stack monitoring system was not operational. [District Rule 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 22. If the monitored NOx concentrations, as measured by the in-stack monitoring system, exceed the permitted emission limits, the permittee shall return the NOx concentrations to the permitted emission limits as soon as possible but no longer than eight (8) operating hours after detection. If the permittee's monitoring system readings continue to exceed the permitted emissions limits after eight (8) operating hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with the permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been reestablished, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. All in-stack monitoring system emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 24. Compliance with the ammonia slip emission limit shall be demonstrated at least once per day, concurrently with the instack analyzer NOx concentration readings, utilizing the following calculation: (ppmvd @ 15% O2) = ((a (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% 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
- 25. 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, and fuel consumption. [District Rule 4703] Federally Enforceable Through Title V Permit
- 26. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
- 27. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64.8] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the record keeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64.9] 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 2201 and 4703, and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 30. 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% O2), and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) a description of any corrective action taken to maintain the emissions within the acceptable range, and (6) the calculated ammonia slip values and each parameter used to perform the calculation. [District Rules 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. 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

33. 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

PERMIT UNIT: C-904-29-10

EXPIRATION DATE: 11/30/2022

EQUIPMENT DESCRIPTION:

58.14 MMBTU/HR (7,170 HP) SOLAR SOLONOX TAURUS 60-7032S GAS TURBINE ENGINE (K-3) SERVED BY A SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION, NOX AND O2 ANALYZERS, DRIVING A NATURAL GAS PIPELINE COMPRESSOR

PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. 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
- 3. Except during periods of startup, shutdown, reduced load, bypass transition, or primary re-ignition, steady state emission rates shall not exceed any of the following emission limits: 8 ppmv NOx (as NO2) @ 15% O2, 0.00280 lb SOx/MMBtu, 0.3 lb PM10/hr, 50 ppmv CO @ 15% O2, 25 ppmv VOC @ 15% O2. All emission rates are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 4. 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-NOx/day, 3.9 lb-SOx/day, 7.3 lb-PM10/day, 156.4 lb-CO/day, or 44.7 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. During startup and shutdown, emissions from the gas turbine shall not exceed 171 ppmvd NOx @ 15% O2 or 0.6203 lb-NOx/MMBtu, based on a per event average. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 6. The total duration of startup and shutdown shall not exceed two hours per day. Startup and shutdown emissions shall be counted toward all applicable emission limits. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 7. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown; however, during such periods, the steady state emission factors stated in this permit shall not apply. [District Rule 4703] Federally Enforceable Through Title V Permit
- 8. Start-up shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full 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
- 9. Emissions shall not exceed either of the following NSPS Subpart GG limits (one hour standard): 171 ppmvd NOx (as NO2) @ 15% O2, or 150 ppmvd SOx (as SO2) @ 15% O2. [40 CFR 60.332 and 60.333] Federally Enforceable Through Title V Permit
- 10. The ammonia slip (NH3) emissions shall not exceed either of the following limits: 0.79 lb/hr or 10 ppmvd @15% O2 over a 3 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: PG & E CO -KETTLEMAN COMPRESSOR STATION Location: 34453 PLYMOUTH AVE, AVENAL, CA 93204 C-904-29-10 Jan 30 2018 2:05PM - SRANK

- 11. Source testing to determine compliance with the NOx, CO, and ammonia (NH3) steady state emission rates (in both lb/hr and ppmvd @ 15% O2) shall be conducted at least once every 12 months. To ensure accuracy of the ammonia slip calculation specified within this permit, the NOx emission concentration at the SCR inlet shall be determined at the facility's typical operating load during annual compliance testing by measuring NOx emissions for a minimum of 10 minutes or until NOx concentration has stabilized. [District Rules 2201, 4102, and 4703, and 40 CFR 60.335(b)] Federally Enforceable Through Title V Permit
- 12. Source testing shall be District witnessed, or authorized, and samples shall be collected by a California Air Resources Board certified testing laboratory. [District Rule 1081, Section 7.2] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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
- 15. The following test methods shall be used: NOx EPA Method 7E or 20 or CARB Method 100; CO EPA Method 10 or 10B or CARB Method 100; ammonia BAAQMD ST-1B; and O2 EPA Method 3, 3A, or 20, or CARB Method 100. Alternative test methods may also be used to satisfy the source testing requirements of this permit if approved by the District and EPA. [District Rules 1081 and 4703, and 40 CFR 60.335] Federally Enforceable Through Title V Permit
- 16. 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
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The permittee shall monitor and record the stack concentration of NOx and O2 at least once per day with the in-stack monitoring system. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 20. The permittee shall perform NOx and O2 accuracy drift checks of the in-stack monitoring system, when the unit is operating, at least once per day in accordance with the requirements of 40 CFR Part 60, Appendices B and F. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 21. During times when the in-stack monitoring system is down for maintenance or repairs, the permittee shall use a District approved portable analyzer to record daily NOx and O2 concentration readings. The permittee shall maintain records of the portable analyzer readings and include the date(s) and reasons the in-stack monitoring system was not operational. [District Rule 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit

- 22. If the monitored NOx concentrations, as measured by the in-stack monitoring system, exceed the permitted emission limits, the permittee shall return the NOx concentrations to the permitted emission limits as soon as possible but no longer than eight (8) operating hours after detection. If the permittee's monitoring system readings continue to exceed the permitted emissions limits after eight (8) operating hours, the permittee shall notify the District within the following one (1) hour, and conduct a certified source test within 60 days to demonstrate compliance with the permitted emissions limits. In lieu of conducting a source test, the permittee may stipulate that a violation has occurred, subject to enforcement action. The permittee must correct the violation, show compliance has been reestablished, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 23. All in-stack monitoring system emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 24. Compliance with the ammonia slip emission limit shall be demonstrated at least once per day, concurrently with the instack analyzer NOx concentration readings, utilizing the following calculation: (ppmvd @ 15% O2) = ((a (b x c/1,000,000)) x (1,000,000 / b)) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% 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
- 25. 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, and fuel consumption. [District Rule 4703] Federally Enforceable Through Title V Permit
- 26. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR Part 64.7] Federally Enforceable Through Title V Permit
- 27. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR Part 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR Part 64.8. [40 CFR Part 64.8] Federally Enforceable Through Title V Permit
- 28. The permittee shall comply with the record keeping and reporting requirements of 40 CFR Part 64.9. [40 CFR Part 64.9] 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 2201 and 4703, and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 30. 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% O2), and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain records of: (1) the date and time of NOx and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOx concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, (5) a description of any corrective action taken to maintain the emissions within the acceptable range, and (6) the calculated ammonia slip values and each parameter used to perform the calculation. [District Rules 4703 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 32. 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

33. 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

PERMIT UNIT: C-904-31-5

EXPIRATION DATE: 11/30/2022

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

- 1. Unit shall be fired exclusively on PUC-quality natural gas, with a maximum sulfur content of 1.0 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. 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
- 3. 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 Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 4. Emissions shall not exceed 0.33 g NOx/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. 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 Rule 2201] Federally Enforceable Through Title V Permit
- 6. The engine shall be equipped with an operational catalytic converter installed on the exhaust outlet. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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
- 8. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 9. 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, 9.3.2] Federally Enforceable Through Title V Permit
- 10. 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
- 11. 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

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

- 12. 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
- 13. 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