

EXPIRATION DATE:
November 3, 2017

PERMIT NUMBER:
90-VP-151d

SHASTA COUNTY
AIR QUALITY MANAGEMENT DISTRICT

PACIFIC GAS AND ELECTRIC COMPANY
(Applicant)

IS HEREBY GRANTED A
TITLE V OPERATING PERMIT
SUBJECT TO CONDITIONS NOTED

TURBINE / NATURAL GAS COMPRESSOR STATION
(Nature of Activity)

AT Highway 299 at Compressor Station Road, Burney, CA
(AP# 028-370-001)

DATE REISSUED: xx xx, 2012

APPROVED: _____
Air Pollution Control Officer

DRAFT

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EQUIPMENT LIST

- ONE (1) 12,500 BHP NATURAL GAS-FIRED TURBINE
(GENERAL ELECTRIC; MODEL# LM 1500 (K-2); SERIAL# 420492)

EQUIPMENT / OPERATION LIST OF INSIGNIFICANT EMISSIONS SOURCES

- ONE (1) 335 BHP NATURAL GAS-FIRED EMERGENCY GENERATOR
- ONE (1) 1,200,000 BTU/HR NATURAL GAS-FIRED PROCESS HEATER
- ONE (1) 320,000 BTU/HR NATURAL GAS-FIRED WATER HEATER
- ONE (1) 40 BHP GASOLINE-FIRED PORTABLE COMPRESSOR
- ONE (1) 91 GALLON-CAPACITY CONDENSATE TANK
- FUGITIVE EMISSIONS SOURCES: VALVES & FLANGES
- SOLVENT CLEANING OPERATIONS
- PAINTING OPERATIONS
- WELDING OPERATIONS
- VENTING - NATURAL GAS

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EMISSION LIMITS AND STANDARDS

1. No person shall discharge contaminants from any single source into the atmosphere in amounts greater than those designated below (unless governed by U.S. Environmental Protection Agency (EPA) New Source Performance Standard (NSPS)). All emissions are to be measured by methods approved for use by the Air Pollution Control Officer (APCO) of the Shasta County Air Quality Management District (SCAQMD or District). Any method approved by the and/or the California Air Resources Board (CARB) is approved for use by the APCO:

- a. Combustion Particulate Matter ^{1,2} 0.15 gr/dscf
- b. Particulate Matter Less Than or Equal to 10 μ in Size ^{1,2} 0.10 gr/dscf
- c. All Other Particulate Matter ^{1,2} 0.15 gr/dscf
- d. Particulate Matter: Maximum Hourly Emissions (E) as a function of Process Weight (P_i) $E \text{ (lbs/hr)} = 4.1 P_i^{0.67}$
- e. Oxides of Sulfur (as SO₂) ^{1,2,3} 300 ppm
- f. Oxides of Nitrogen (as NO₂) ^{1,2,3,4,5} 250 ppm
- g. Opacity / Ringelmann ⁶ 40% / #2

Footnotes:

- ¹ Calculated at standard conditions: 70° F, one atmosphere, dry gas basis.
- ² When the emissions are generated by a combustion process, the gas volume shall be corrected to 12% CO₂ at standard temperature and pressure.
- ³ The APCO may specify an appropriate correction and/or reporting factor depending upon the type of process involved.
- ⁴ Pursuant to footnote #3, the APCO has specified that the NO_x emissions limit be corrected to 15% O₂, standard temperature and pressure for the turbines.
- ⁵ SCAQMD Rule 3:2 is interpreted as not being applicable to internal combustion engines.
- ⁶ Pursuant to the California Health & Safety Code Section 41701.

[SCAQMD Rule 3:2 -- Specific Air Contaminants; 54 FR 14650 (04/12/89)]

2. No person shall discharge from any device, contrivance, or machine more than forty (40) pounds per day of any photochemically reactive substance other than those described above unless such discharge is controlled to reduce emissions by 85%.

[SCAQMD Rule 3:4 -- Industrial Use of Organic Solvents; 49 FR 47491 (10/03/84)]

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OPERATING CONDITIONS

3. No person shall build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation.
[SCAQMD Rule 3:6 -- Circumvention; 42 FR 42223 (08/22/77)]
4. The permittee shall obtain the approval of the APCO prior to using a halogenated solvent in the cold cleaning solvent degreaser.
[40 CFR 63 Subpart T -- MACT Standards: Halogenated Solvent Cleaning Operations]
5. The permittee shall use only PUC regulated natural gas in all natural gas burning equipment.

TESTING, MONITORING, AND REPORTING REQUIREMENTS

6. Exceedance of any emission limits established in this permit or emission limits for which a variance was granted shall be immediately reported to the APCO. Related requirements include:
 - a. For any scheduled maintenance of an emission source listed in this permit, the operator shall notify the APCO at least twenty-four (24) hours prior to shutdown, whether or not an emission exceedance is expected.
 - b. The operator shall notify the APCO within four (4) hours of the occurrence of any excess emissions and provide information on the time, duration, cause, and extent of the excess emissions. Upon the request of the APCO, a full, written report of each occurrence shall be submitted to the District, including a statement of all known causes and the nature of the actions to be taken.
 - c. Corrective action shall be taken immediately by the operator of the emission source to correct the conditions causing excessive emissions in the effort to reduce the frequency of the occurrence of such conditions. In no event shall equipment be operated in a manner that creates excessive emissions beyond the end of the work shift or twenty-four (24) hours, whichever occurs first.
 - d. An emergency constitutes an affirmative defense to any action brought for non-compliance with technology-based emission limits if:
 - 1) The emission source operator can identify the cause(s) of the emergency;
 - 2) The permitted facility was at the time being properly operated;
 - 3) During the period of the emergency, the emission source operator took all reasonable steps to minimize levels of excess emission; and
 - 4) The emission source operator submitted notice of the emergency to the APCO in accordance with this condition.

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TESTING, MONITORING, AND REPORTING REQUIREMENTS (cont)

6. d. An emergency constitutes ... (continued)

Within two (2) working days of the emergency event, the operator shall provide the District with a description of the emergency and any mitigating or corrective actions taken. Within two (2) weeks of an emergency event, the responsible official shall submit to the District a properly signed contemporaneous log or other relevant evidence that contains all the information for what constitutes an emergency.

{For the purposes of this condition, "emergency" shall be defined as "any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency" -- as defined in 40 CFR 70.6(g)}

- e. An excess emission occurrence may not avoid enforcement action by the APCO if the occurrence is caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- f. Nothing expressed in this condition shall be construed to limit enforcement authorities under the Federal Clean Air Act.
- g. Excess emissions during startup and shutdown shall be considered a violation (except as allowed by 40 CFR 60.8(c)) if the operator cannot demonstrate, when requested to do so by the APCO, that the excess emissions are unavoidable. The APCO may specify for a particular source, the amount, time, duration, and under what circumstances excess emissions are allowed during startup or shutdown. The operator shall, to the extent practicable, operate the emission source and any associated air pollution control equipment or monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during startup and shutdown.
- h. In any enforcement proceeding, the operator has the burden of proof for establishing that an emergency occurred. If the operator fails to provide sufficient information, the APCO shall undertake appropriate enforcement action.
[SCAQMD Rule 3:10 -- Excess Emissions; SCAQMD Rule 5]
7. The permittee shall promptly report any deviation from permit requirements including that attributable to upset conditions to the APCO. If the deviation is not defined, reporting shall be no longer than ten (10) days after the deviation. A report using District approved forms, for each deviation from the permit requirement, shall be prepared by the permittee if requested by the APCO within two (2) weeks after the initial detection of the deviation. Unless requested earlier by the APCO, these reports shall be submitted to the APCO as part of the permittee's semi-annual monitoring report.
[SCAQMD Rule 3:10 -- Excess Emissions; SCAQMD Rule 5]

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TESTING, MONITORING, AND REPORTING REQUIREMENTS (cont)

8. The permittee shall submit a written monitoring report to the APCO every six (6) months. A copy of the EPA twelve-month certification report shall suffice for one of the six-month monitoring reports annually. The reporting periods shall be November 3 through May 2 and May 3 through November 2. The report shall be submitted within forty-five (45) days of the end of each reporting period and state whether compliance was continuous or intermittent during this period.

When no deviations have occurred for the reporting period, such information shall be stated in the report. The monitoring report shall include at a minimum:

- a. A report for each deviation from a permit requirement that occurred during the reporting period, including emergency events. All reports of a deviation from permit requirements shall include the probable cause of the deviation and any preventative or corrective action taken. The permittee shall use District approved forms to report each deviation from permit requirements.
 - b. Results from any emission testing done during the reporting period.
 - c. A Certification Report form (Form 5-J1), which includes a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report.
[SCAQMD Rule 5]
9. The permittee shall submit compliance certification reports to the U.S. EPA and the APCO every twelve (12) months. The report shall be submitted within forty-five (45) days of the end of the reporting period. The permittee shall use District approved forms for the compliance certification and shall also include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report and includes the following phrase "based upon information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete."

Compliance certifications shall be sent to EPA at the following address:

U.S. EPA Region 9
Air Division (AIR-3)
75 Hawthorne Street
San Francisco, CA 94105-3901

[SCAQMD Rule 5]

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TESTING, MONITORING, AND REPORTING REQUIREMENTS (cont)

10. The permittee shall emission test the turbine for compliance of the NO_x emission limit (as specified in condition # 1). The test method shall be in accordance with either CARB Method 100, CARB Method 20, USEPA Method 20, or a subsequent or alternative method approved by the APCO. The permittee shall emission test any other facility emissions source for the NO_x emission limit (as specified in condition #1) upon the request of the APCO. Any method approved by the EPA and/or the CARB will be approved by the APCO. The testing frequency shall follow the test schedule format per SCAQMD Rule 2:11.

Emission Rate	Test Schedule
< 25 tons/yr	voluntary -- or at the request of the SCAQMD
≥ 25 tons/yr to < 50 tons/yr	once every three (3) years
≥ 50 tons/yr to < 100 tons/yr	once every two (2) years
≥ 100 tons/yr	once every year

[SCAQMD Rule 2:11 -- Fees]

11. The permittee shall emission test for compliance of the particulate matter emission limits (as specified in condition #1) upon the request of the APCO. If testing is conducted, the permittee shall conduct the test in accordance with the methodologies contained in CARB Methods 1 through 5 or subsequent or alternative methods approved by the APCO.

[SCAQMD Rule 2:11 -- Fees]

12. The permittee shall emission test for compliance of the oxides of sulfur emission limit (according to condition #1) upon the request of the APCO. If testing is conducted, the permittee shall conduct the test in accordance with the methodology contained in CARB Method 20, USEPA Method 20, or subsequent or alternative methods approved by the APCO.

[SCAQMD Rule 2:11 -- Fees]

13. The permittee shall emission test for compliance of the opacity emission limit (according to condition #1) upon request of the APCO. If testing is conducted, the permittee shall conduct the test in accordance with the methodology contained in USEPA Method 9.

[SCAQMD Rule 2:11 -- Fees]

14. The permittee shall maintain records of PUC natural gas usage.

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TESTING, MONITORING, AND REPORTING REQUIREMENTS (cont)

15. Records of all monitoring and support information shall include the following:
- a. Date, place, and time of measurement or monitoring equipment maintenance activity;
 - b. Operating conditions at the time of measurement or monitoring equipment maintenance activity;
 - c. Date, place, name of company or entity that performed the measurement or monitoring equipment maintenance activity and the methods used; and
 - d. Results of the measurement or monitoring equipment maintenance. All monitoring and support information shall be retained for at least five (5) years from date of collection, measurement, report, or application.
[SCAQMD Rule 5]
16. Testing for oxides of nitrogen (NO_x), carbon monoxide (CO), and non-methane organic compound (NMOC) emissions from any replacement emission unit shall be conducted within sixty (60) days of completed installation, defined as when the replacement unit is operating at normal load under continuous service. Emissions of the above pollutants expressed in pounds per hour (lbs/hr) from the replacement emission unit shall be demonstrated to be less than or equal to the original K-2 turbine.
17. Fuel flow rate to the replacement emission unit shall be limited to the amount verified on the most recent emission test of the original emission unit to assure that pertinent pollutant emissions do not increase.
18. Prior written authorization for intended replacement of an existing emission unit shall be obtained from the District for all future replacements.
19. The operator of any stationary internal combustion engine claiming an exemption from District Rule 3:28 shall maintain annual operating records and/or support documentation necessary to claim exemption. This information shall be maintained for two (2) years and shall be submitted to the APCO upon request.
[SCAQMD Rule 3:28 -- Stationary Internal Combustion Engines]

STANDARD CONDITIONS

20. The permittee shall comply with all permit conditions of this Title V Operating Permit.
[SCAQMD Rule 5]
21. The permit does not convey property rights or exclusive privilege of any sort.
[SCAQMD Rule 5]
22. The non-compliance with any permit condition herein is grounds for Title V Operating Permit and District Permit To Operate termination, revocation, modification, enforcement action, or denial of permit renewal.
[SCAQMD Rule 5]

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STANDARD CONDITIONS (cont)

23. This permit may be modified, revoked, re-opened, re-issued, or terminated for cause as determined by the District.
[SCAQMD Rule 5]
24. It shall not be a defense for the 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 this permit.
[SCAQMD Rule 5]
25. A pending permit action or notification of anticipated non-compliance does not stay any permit condition.
[SCAQMD Rule 5]
26. Within a reasonable time period, the permittee shall furnish any information requested by the APCO, in writing, for the purpose of determining compliance with the permit, or whether cause exists for a permit or enforcement action.
[SCAQMD Rule 5]
27. Any person who is building, erecting, altering, or replacing any article, machine, equipment or other contrivance, or multi-component system including same, portable, or stationary, and who is not exempt under the California Health and Safety Code (CH&SC) Section 42310, the use of which may cause the issuance of air contaminants, shall first obtain written authority for such construction from the APCO.
[SCAQMD Rule 2:1A -- Permits Required; 54 FR 26381 (06/18/82)]
28. Before any article, machine, equipment or other contrivance, or multi-component system including same, portable or stationary, not exempt under CH&SC Section 42310, the use of which may cause the issuance of air contaminants, may be operated or used, a written permit shall be obtained from the APCO.
[SCAQMD Rule 2:1A -- Permits Required; 54 FR 26381 (06/18/82)]
29. Where an application for or issuance of a permit is pending, or in the event of an emergency occurring as a result of an excusable malfunction of a device under permit, the APCO may authorize the operation of the article, machine, equipment, device, or other contrivance or multi-component system for which a permit is sought for periods of time not to exceed sixty (60) days each for the purpose of testing, experimentation, or obtaining necessary data for a permit or correcting a malfunction. No fee or application will be required for such authorization.
[SCAQMD Rule 2:1A -- Permits Required; 54 FR 26381 (06/18/82)]
30. Any open vegetation burning at the facility must be done in accordance with District open burning rules and regulations.
[SCAQMD Rule 2:6 & Rule 2:7 -- Open Burning: General Provisions & Conditions]

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STANDARD CONDITIONS (cont)

31. No person shall willfully deface, alter, forge, counterfeit, or falsify a District Permit To Operate in reference to any article, machine, equipment, or other contrivance.
[SCAQMD Rule 2:24 -- Defacing Permit; 37 FR 19812 (09/22/72)]
32. A person who has been granted a District Permit To Operate shall firmly affix such permit, an approved facsimile, or other approved identification bearing the permit number upon the article, machine, equipment or other contrivance in such a manner as to be clearly visible and accessible. In the event that the article, machine, equipment or other contrivance is so constructed or operated that the District Permit To Operate cannot be so placed, the District Permit To Operate shall be mounted so as to be clearly visible in an accessible place within twenty-five (25) feet of the article, machine, equipment, or other contrivance, or maintained readily available at all times on the operating premises.
[SCAQMD Rule 2:23 -- Posting of Permit to Operate; 54 FR 14650 (09/22/72)]
33. All information, analyses, plans, or specifications that disclose the nature, extent, quantity, or degree of air contaminants or other pollution that any article, machine, equipment, or other contrivance will produce and that any air pollution control district or any other state or local agency or District requires any applicant to provide before such applicant builds, erects, alters, replaces, operates, sells, rents, or uses such article, machine, equipment, or other contrivance, are public records. All air or other pollution monitoring data, including data compiled from stationary sources, are public records.
- a. Except as otherwise provided in “b”, trade secrets are not public records under this section. As used in this section, trade secrets may include (but are not limited to) any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information that:
- 1) Is not patented;
 - 2) Is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value;
 - 3) Gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.
- b. Notwithstanding any other provision of law, all air pollution emission data, including those emission data that constitute trade secrets as defined in part “a”, are public records. Data used to calculate emission data are not emission data for the purposes of this subdivision, and data that constitute trade secrets and that are used to calculate emission data are not public records.
[SCAQMD Rule 2:25 -- Public Records / Trade Secrets; 42 FR 42223 (08/22/77)]
34. Each and every provision of Federal or State law or applicable Air Basin Plan now or hereinafter enacted or as amended that regulates the discharge of any air contaminants is incorporated here by reference. Where such provisions conflict with local rules and regulations, the more restrictive provisions shall apply.
[SCAQMD Rule 3:1 -- Applicability of State Laws; 42 FR 42223 (08/22/77)]

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STANDARD CONDITIONS (cont)

35. The Regional Administrator of the EPA, the Executive Officer of the CARB, the APCO, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises:
- a. To inspect the stationary source, including equipment, work practices, operations, and emission-related activity;
 - b. To inspect and duplicate records required by this Title V Operating Permit; and
 - c. To sample substances or monitor emissions from the source or other parameters to assure compliance with the operating permit conditions or applicable requirements. Monitoring of emissions can include source testing.
[SCAQMD Rule 5]
36. The provisions of this Title V Operating Permit are severable, and, if any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.
[SCAQMD Rule 5]
37. This Title V Operating Permit shall become invalid five (5) years from the date of issuance. For permit renewal, the permittee shall submit a standard District application no earlier than eighteen (18) months and no later than six (6) months before the expiration date of the current permit. Upon submittal of a timely and complete renewal application, this Operating Permit shall remain in effect until the APCO issues or denies the renewal application.
[SCAQMD Rule 5]
38. The permittee shall pay an annual supplemental fee for the Title V Operating Permit as determined by the supplemental fee calculation method. If a supplemental annual fee is required, the fee shall be paid to the District in a timely basis. Failure to remit this fee on a timely basis is grounds for forfeiture of the Title V Operating Permit and the District Permit To Operate (#90-PO-151d). Operation of this source without a Title V or District permit subjects the source to potential enforcement action by the District and the EPA pursuant to the Federal Clean Air Act - Section 502(a).
[SCAQMD Rule 5]
39. Persons opening appliances using CFC's, HCFC's, or other ozone depleting substances for maintenance, service, repair, or disposal must comply with the required practices.
[40 CFR 82.156 -- Protection Of Stratospheric Ozone]
40. Equipment used during the maintenance, service, repair, or disposal of appliances using CFC's, HCFC's, or ozone-depleting substances must comply with the standards for recycling and recovery equipment .
[40 CFR 82.158 -- Protection Of Stratospheric Ozone]
41. Persons performing maintenance, service, repair or disposal of appliances using CFC's, HCFC's, or other ozone-depleting substances must be certified by an approved technician certification program.
[40 CFR Part 82.161 -- Protection Of Stratospheric Ozone]

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STANDARD CONDITIONS (cont)

42. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in the permit. [SCAQMD Rule 5]

PERMIT SHIELD

43. In accordance with 40 CFR 70.6, compliance with terms and conditions of this permit shall be deemed to be compliant with the following federal laws and regulations regarding air quality as of the date of permit issuance which were considered during the review of the renewal of this permit. For the turbine / natural gas compression operation, compliance with the conditions of this permit shall be assumed to be compliance with District State Implementation Plan Rules number 1:2, 2:1A, 2:5, 2:6, 2:12, 2:14, 2:23, 2:24, 2:25, 3:1, 3:2, 3:4, 3:6, 3:9, 3:11, and 3:17. Also, compliance with the conditions of this permit shall be assumed to be in compliance with Federal Clean Air Act regulations contained in 40 CFR 60 (Subparts A, GG, and KKKK) and 40 CFR 64. 40 CFR 60 Section 60.5 is not included in this permit shield because the facility operator has not requested the Administrator to make a determination of construction or modification. For the facility, compliance with the conditions of this permit shall be assumed to be in compliance with 40 CFR 68 and 40 CFR 82.
[40 CFR Part 70.6 (f) -- State Operating Permit Programs]