MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B008887

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: AUGUST 2024

OWNER OF OPERATOR (Co.#15)

Pacific Gas & Electric/Air Permits
PO Box 7640
San Francisco, CA 94120

EQUIPMENT LOCATION (Fac.#535)

PG&E - Hinkley Compressor Station
35863 Fairview Road
Hinkley, CA 92347

Description:
NATURAL GAS IC ENGINE, GENERATOR (P-7) consisting of: Non-selective catalytic reduction exhaust treatment system.

One Waukesha, NG fired internal combustion engine Model No. L7042GSI and Serial No. C-94583/2, Turbo Charged, After Cooled, Four-Stroke Rich Burn, producing 1083 bhp with 12 cylinders at 900 rpm while consuming a maximum of 7.0 scf/hr. This equipment powers a TBD Generator Model No. VHP 7100GSI and Serial No. C-94583-901/2, rated at 767 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
NOx	0.36	lbs/hr
PM10	0.24	lbs/hr
VOC	0.36	lbs/hr

CONDITIONS:

1. This engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, and in a manner consistent with safety and good air pollution control practices for minimizing emissions. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 204; 40 CFR 63.6605(a); 63.6605 (b)]

Fee Schedule: 1 (d) | Rating: 1083 bhp | SIC: 4939 | SCC: 20200202 | Location/UTM(Km): 485E/3862N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

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By: **COPY**
Brad Poiriez
Air Pollution Control Officer

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time. [District Rule 1160]

3. This equipment shall not be operated without venting through its properly operating non-selective catalytic reduction system. [District Rules 204 and 1303; 40 CFR Part 64 (CAM applicable for NOx)]

4. Emissions from this equipment to the atmosphere shall not exceed the following emission limits:

(a) Emissions, verified by compliance tests conducted at least once every twenty-four (24) months:
(i) NOx as NO2- 0.36 lb/hr (averaged over one hour
(ii) NOx- 50 ppmvd 15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes
(iii) VOC as CH4- 0.36 lb/hr
(iv) VOC- 106 ppmvd15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes
(v) PM10- 0.24 lb/hr
(vi) SOx- 0.009 lb/hr
(vii) CO- 1.43 lb/hr
(viii) CO- 4500 ppmvd15 percent volume stack gas oxygen measured on a dry basis and averaged over 15 consecutive minutes

(b) Annual rates, based on a rolling 12 month summary, verified by fuel use and annual compliance tests:
(i) NOx- 3134 pounds/year
(ii) VOC- 3134 pounds/year
(iii) SOx- 76 pounds/year
(iv) PM10- 2090 pounds/year
(v) CO- 6 tons/year
[District Rules 204, 1160 (spark ignited, rich burn) and 1303]

5. Fuel consumption shall be monitored using a continuous monitoring system. The operator shall install, calibrate, maintain and operate this monitoring system according to a District-approved monitoring plan, and it shall be installed prior to initial equipment startup. [District Rules 204, 1160 and 1303; 40 CFR Part 64 (CAM applicable for NOx)]

6. The owner/operator of any Internal Combustion Engine equipped with existing Emission Control Equipment or required to install Emissions Control Equipment to achieve compliance with this rule shall:
(i) Install, operate, and maintain in calibration, the following monitoring equipment, as approved by the APCO:
a. Continuous measurement and recording of Emissions Control System Operating Parameters;
b. Continuous measurement and recording of elapsed time of operation; and,
c. An Enhanced Emissions Monitoring Device.
[Rule 1160(E)(1)(b)(i) - NOx emissions control monitoring]

7. The owner/operator (o/o) shall perform the following compliance tests at least once every twenty-four (24) months beginning in 2004 during the six-week commissioning period (commencing with first fire of this device) in accordance with the MDAQMD Compliance Test Procedural Manual. The following compliance tests are required:
(a) NOx as NO2 in lb/hr (measured per USEPA Reference Method 7E or CARB Method 100)
(b) VOC as CH4 in lb/hr (measured per USEPA Reference Methods 25A and 18)
(c) CO in lb/hr (measured per USEPA Reference Method 10)
(d) PM10 in lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5). PM10 testing may be discontinued after the o/o has demonstrated compliance for two consecutive tests. If the o/o deviates from any of the operating limitations in conditions 1, 5 or 7, o/o must resume PM performance testing.

In accordance with District Rule 1160, when a compliance test fails to demonstrate compliance with the above emission limits, the frequency of the compliance test must be shortened to taking place at least once every twelve (12) months or until a passing test is recorded; thereafter, the test period may be extended to once every twenty-four (24) months.

[District Rules 1160 and 1303; 40 CFR Part 64 (Cam applicable for NOx)]

The owner/operator must submit a compliance/certification test protocol at least thirty (30) days prior to the compliance/certification test date. The owner/operator must conduct all required compliance/certification tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/certification test date so that an observer may be present. The final compliance/certification test results must be submitted to the District within forty-five (45) days of completion

of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov

8. The o/o shall maintain a log for this equipment, which, at a minimum, contains the information specified below. This log shall be maintained current and on-site for a minimum of five (5) years and shall be provided to District personnel on request:
(a) Inspections at least every quarter or every 2,000 hours of operation whichever is more frequent which includes:
(i)Date of inspection;
(ii) Records of testing;
(iii) Date and a summary of any emissions corrective maintenance taken;
(b) Quarterly fuel consumption;
(c) Quarterly hours of operation;
(d) Records of the occurrence and duration of each malfunction of operation and the actions taken to correct such malfunction of operation; [40 CFR 63.6655(a)]
(e) Records of actions taken during periods of malfunction to minimize emissions in accordance with subpart 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control (if any) and monitoring equipment to its normal or usual manner of operation; and
(f) Records of each instance in which the emission and operating limitations are not met. [63.6640 (b)]
[District Rules 1160, 1303 and 1203(D)(1)(d)(ii); 40 CFR Part 64; 40 CFR Part 63 Subpart ZZZZ; 40 CFR 70.6(a)(3)(ii)(B)]

9. This equipment shall not operate unless the engine crankcase is ventilated through a blower assisted mist eliminator.
[District Rules 204 and 1303]

10. The owner/operator must meet the following emission limitation, except during periods of startup. During periods of startup o/o must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(a) Emissions of formaldehyde shall be either (1) reduced by 76% or greater or (2) limited to a concentration of 350 ppbvd formaldehyde at 15 percent O2 or less. Emission limit must be verified by initial performance test (retested whenever catalyst is changed). When electing to demonstrate compliance with the concentration limit, O/o must conduct subsequent performance tests semiannually (or as allowed by 40 CFR Part 63).
[40 CFR 63.6640; 63.6640 (b)]

11. The owner/operator shall install and maintain a Continuous Parameter Monitoring System (CPMS) to continuously monitor and record catalyst inlet temperature.
[District Rule 1160, 40 CFR 63.6625; 40 CFR Part 64 (CAM applicable for NOx)]

12. The owner/operator shall create and follow a site-specific monitoring plan that addresses the monitoring system design, data collection, and quality assurance and quality control elements required by 40 CFR 63.6625(b)(1).
[40 CFR Part 64 (CAM applicable for NOx)]

13. Except during periods of startup, the owner/operator shall maintain the temperature of the exhaust so that the catalyst inlet temperature is greater than or equal to 750 degrees Fahrenheit (F) and less than or equal to 1250 degrees F.
[40 CFR 63.6600(a), Table 1b; 40 CFR Part 64 (CAM applicable for NOx)]

14. The owner/operator shall measure the pressure drop across the catalyst once per month or as allowed by the district approved Alternative Monitoring Method. The difference in the pressure drop measured during the periodic monitoring and the baseline pressure drop shall not exceed 2 inches of water. The baseline pressure drop shall be established during the most recent compliance demonstration (for formaldehyde).
[District Rule 1160; 40 CFR 63.6625; 40 CFR 63.8; 40 CFR Part 64 (CAM applicable for NOx)]

15. The owner/operator must include the following in the semi-annual compliance reports required by this facility's Title V Permit-Part II, section B, Condition 5:

(a) number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded; and

(b) a description of actions taken by the owner/operator during a malfunction to minimize emissions in accordance with 63.6605(b), including actions taken to correct a malfunction.
(c) If there are no deviations from any emission or operating limitations that apply to P-6, P-7, P-8, and P-9, a statement that there were no deviations from the emission or operating limitations during the reporting period.
(d) If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

16. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b); H&S Code 39607 & 44341-44342; and 40 CFR 51, Subpart A]