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

B002660

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.#39)

PG&E - Topock Compressor Station
145453 National Trails Highway
Needles, CA 92363

Description:
DIESEL IC ENGINE, GENERATOR (P5) consisting of: Equipped with a DCL International MINEXFF Soot (Diesel Particulate) Filter (or DPF), size 20 by 15 (custom made), Item Number 8000FF-5556-11.

One Caterpillar, Diesel fired internal combustion engine Model No. D348 and Serial No. 36J2291, Turbo Charged, After Cooled, producing 755 bhp with 12 cylinders at 1800 rpm while consuming a maximum of 46.0 gal/hr. This equipment powers a TBD Generator Model No. 680FDC4359AA-R236W and Serial No. CE-95407, rated at 620 kW(e).

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	2.5	gm/bhp-hr
NOx	10.9	gm/bhp-hr
PM10	0.22	gm/bhp-hr
SOx	0.18	gm/bhp-hr
VOC	0.34	gm/bhp-hr

CONDITIONS:

1. This existing, diesel 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

Fee Schedule: 1 (c) | Rating: 755 bhp | SIC: 4939 | SCC: 20100102 | Location/UTM(Km): 730E/3844N

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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San Francisco, CA 94120

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

in accordance with all data and specifications submitted with the application for this permit.
[40 CFR 63.6605(a); 63.6605 (b); Rule 204 - Permit Conditions]

2. The equipment shall only be fired on Diesel fuel with sulfur content not exceeding 0.0015% (15 ppm) on a weight basis.
[Rule 431 - Sulfur Content of Fuels]

3. The IC engine shall be equipped with a non-resettable hour meter capable of totalizing the elapsed operating time of the engine to the nearest hour. The hour meter shall have a minimum range of 9,999 hours. [17 CCR 93115(e)(4)(G)1]

4. O/o 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. Owner/operator shall either (1) limit the concentration of CO emissions to 23 ppmvd, or less, at 15% O2 OR (2) reduce CO emissions by 70% or more.
[40 CFR 63.6600, Table 2c, No. 5]

5. Owner/operator shall demonstrate compliance with the above CO emission limit in accordance with the performance test methods and procedures specified below:
a. CO emissions for compliance tests shall be determined by using EPA Method 10.
b. Oxygen content for compliance tests shall be determined by using EPA Method 3/3A/3B.
c. Moisture content for compliance tests shall be determined by using EPA Method 4 or Method 320.

6. Owner/operator shall conduct subsequent performance tests every 8,760 hours or once every thirty-six (36) months, or whenever catalyst is changed, whichever comes first.
[40 CFR 63.6615]

7. 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. Owner/operator shall install and maintain a Continuous Parameter Monitoring System (CPMS) to continuously monitor and record catalyst inlet temperature.
[40 CFR 63.6625(b), (g), (h); Table 6]

9. 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 63.6625(b)(1)]

10. Owner/operator shall measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limit established by the most recent performance test.
[40 CFR 63.6625]

11. Owner/operator shall maintain the temperature of the exhaust so that the catalyst inlet temperature is greater than or equal to 450 degrees Fahrenheit (F) and less than or equal to 1350 degrees F.
[40 CFR 63.6600(d)]

12. The IC engine shall be equipped with a closed crankcase ventilation system.
[40 CFR 63.6625]

13. The exhaust from the IC engine shall be controlled by the Diesel Particulate Filter (DPF) at all times while the engine is operating. The particulate emission rate from the DPF shall not exceed 0.233 g/bhp-hr, verified by an initial compliance test performed not later than 60 days after the installation of the DPF.

14. The DPF shall be equipped with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

15. The o/o shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:
a. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
b. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
c. 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)]
d. 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
e. Records of each instance in which the emission and operating limitations are not met. [63.6640 (b)]
[Rule 204 - Permit Conditions]

16. Owner/operator must include the following in the in the semi-annual compliance reports required by Part II, section B, Condition 5 (of this facilities FOP);
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 this unit, 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.

17. This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).