

## 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

B012868

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: OCTOBER 2024**

## OWNER OF OPERATOR (Co.#31)

Southern California Gas Co. - MD 9400 Oakdale Avenue Chatsworth, CA 91313

## EQUIPMENT LOCATION (Fac.#1437)

SCG - Blythe 13100 W 14th Avenue Blythe, CA 92225

#### **Description:**

NATURAL GAS IC ENGINE, PRIME GENERATOR 5, PHASE I (GENERATOR BUILDING) consisting of: GE Power Waukesha with emPact Emission Control System. Year of Manufacture is 2018; 4SRB, Engine Meets Stationary Spark Ignition ICE NSPS Requirements Pursuant to 40 CFR 60, Subpart JJJJ as the Manufacture Date is Subsequent to 2006; is equipped with three-way catalysts/non-selective catalytic reduction permitted under valid District Permit C012874. Equipment Elevation is 260 feet above sea level. Stack is 35 feet high, and has a diameter of 1.17 feet. Exhaust flow rate is 4,930 cfm at a temperature of 1061 Degrees F. Note: The facility is currently a HAP Major Source. Once the facility has undergone both Phase I and Phase II Modifications, the facility will become a HAP area source.

One GE Power Waukesha, NG fired internal combustion engine Model No. L7042GSI S4 and Serial No. 5283705776, producing 1088 bhp with 12 cylinders at 900 rpm while consuming a maximum of 9289 scf/hr. This equipment powers a Generator Model No. AA29470000 and Serial No. 46938-01, rated at 770 kWe.

#### **EMISSIONS RATES**

Emission Type	Est. Max Load	Unit
СО	0.6	gm/bhp-hr
NOx	0.15	gm/bhp-hr
PM10	19.8	lbs/MMscf
SOx	0.60	lbs/MMscf
VOC	0.12	gm/bhp-hr

Fee Schedule: 1 (d)	Rating: 1088 bhp	SIC: 4922	SCC: 20100202	Location/UTM(Km): 719E/3271N

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.

Southern California Gas Co. - MD PO Box 2300, SC 9314 Chatsworth, CA 91313-2300



Brad Poiriez Air Pollution Control Officer 1. This engine, certified in accordance with 40 CFR Part 1048, and after treatment control device Permitted under District Permit C012874 shall be installed, operated and maintained according to the manufacturer's emission-related written instructions. Further, the owner/operator shall change only those emission-related settings that are permitted by the manufacturer. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit. [40 CFR 60.4231(c), 60.4233(c), 60.4234, and 60.4243(a)(2)(ii)]

2. This equipment shall be exclusively fueled with pipeline quality natural gas with a sulfur content not exceeding 1.0 grains per 100 dscf on a rolling twelve month average basis; not to exceed 81.37 mmcf/yr. Compliance with this limit shall be demonstrated by providing evidence of a contract, tariff sheet or other approved documentation that shows that the fuel meets the definition of pipeline quality gas. [District Rules 431-Sulfur Content of Fuel, and 1302 (C)(2)(a)-BACT]

3. A non-resettable four-digit (9,999) hour timer and/or fuel meter shall be installed and maintained on this unit to indicate elapsed engine operating time and/or fuel used. [District Rule 1302(C)(2)(a)]

4. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction permitted under valid District Permit C012874. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]

5. The owner/operator 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 following information:

a. Calendar year operation in terms of fuel consumption (in standard cubic feet) or total hours; and

b. Maintenance and repair actions, including date and description.

[40 CFR 60.4243(a)(1) and 60.4245(a)(2)]

6. This engine is subject to 40 CFR 60, Subpart JJJJ - New Source Performance Standard for Stationary Spark Ignition Internal
Combustion Engines and these permit conditions. In the event of conflict, the more stringent requirements shall apply.
[District Rules 204 and 1302]

7. The owner/operator must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. Test shall be performed in accordance with 40 CFR 60 Subpart JJJJ and the Districts Source Test Protocols:

a. Measurements to determine O2 concentration must be made at the same time as the measurements for NOX concentration using EPA Method 3, 3A, or 3Bb of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00.

b. Exhaust flowrate of the stationary internal combustion engine exhaust shall be determined using EPA Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7.

c.Measurements to determine moisture must be made at the same time as the measurement for NOX concentration using EPA Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03.

d. NOX sampling shall occur at the outlet of the control device using EPA Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03.Results of this test consist of the average of three 1-hour or longer runs.

e. CO shall be sampled at the outlet of the control device using EPA Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03.

f. VOC shall be sampled at the outlet of the control device using EPA Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a hydrocarbon cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D6348-03.

g. Sampling port locations and exhaust traverse points shall be made in accordance with Table 2 to Subpart JJJJ of Part 60 -

Requirements for Performance Tests.

(See: https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.jjjj) [District Rule 204, 1302 and Subpart JJJJ]

8. The operation of this equipment is contingent on simultaneous emission reductions from pre-existing equipment, therefore, the following sequence must occur to preclude excess emissions:

The modification of Engines permitted as Clark Engines B013092 (Clark 11), B013093 (Clark 12), B013095 (Clark 14), and B013096 (Clark 15), shall occur during Phase I portion of the BCS NSR project. These Modifications shall occur prior to the operation of this equipment.

Note: The collective emission reductions shall be used as Simultaneous Emission Reduction Credits (SERCs) for the following new equipment: 2-New Turbine Driven Compressors; B012852, B012853, 5-New Natural Gas fired Reciprocating Engines; B012864, B012865, B012866, B012867, and B012868 and 1-New Emergency Fire Water Pump, E013097. [District Rules 204 and 1302(C)(2(a)]

9. 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]