



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

B014548

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JUNE 2025

OWNER OF OPERATOR (Co. #2588)

Rhea's Garden, CA, Inc.
16556 Beaver Road
Adelanto, CA 92301

EQUIPMENT LOCATION (Fac. #4009)

Rhea's Garden, CA, Inc.
16556 Beaver Road
Adelanto, CA 92301

Description:

NATURAL GAS IC ENGINE, GENERATOR consisting of: Natural gas engine, USEPA family LPSIB31.8NGP, manufactured in 2020. Exhaust flow of 3179 acfm, at 1382 degrees Fahrenheit through a 12 foot high by 1 foot diameter exhaust stack. Engine is equipped with factory installed three-way catalyst and pre- and post-catalyst O2 sensors.

OnePower Solutions International, Inc., NG fired internal combustion engine Model No. 31.8LTCAC and Serial No. TBD, Three-Way Catalyst (also NSCR), Four-Stroke Rich Burn, After Cooled, Air-To-Fuel Ratio Controller, Turbo Charged, producing 805 bhp with 12 cylinders at 1800 rpm while consuming a maximum of 5.797 MMBtu/hr. This equipment powers a Power Solutions International, Inc. Generator Model No. TBD and Serial No. TBD, rated at 540 kW.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.56	gm/bhp-hr
NOx	0.05	gm/bhp-hr
PM10	0.01	lbs/MMBtu
PM2.5	0.01	lbs/MMBtu
SOx	0.014	lbs/MMBtu
VOC	0.204	gm/bhp-hr

CONDITIONS:

Fee Schedule: 1 (c) Rating: 805bhp SIC: 2833 SCC: 20100202 Location/UTM(Km): 457E/3824N

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.

Rhea's Garden, CA, Inc.
16556 Beaver Rd Ste B
Adelanto, CA 92301

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

1.This stationary, spark-ignited, internal combustion engine and its associated control device (Three-Way Catalyst) and air/fuel ratio controller shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. 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, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, subpart 60.4243; District Rule 1302]

1.This stationary, spark-ignited, internal combustion engine and its associated control device (SCR) shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. 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 1302; 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, subpart 60.4243]

2.A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time.
[40 CFR 60.4237]

2.This unit shall only be fired on PUC regulated Pipeline quality natural gas fuel.
[District Rules 431 and 1302; 40 CFR 60.4243]

3.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(E)(1)(b); 40 CFR 60.4237]

3.This unit shall only be fired on PUC regulated Pipeline quality natural gas fuel.
[40 CFR 60.4243, District Rules 431 and 1302]

4.This engine shall not be operated unless all of the following engine systems are properly functioning:

- a. Air-to-Fuel Ratio Controller
- b. Oxygen Sensor
- c. Non-Selective Catalytic Reduction

Furthermore, no changes shall be made to any of the above systems unless done so by a factory certified technician or as allowed with prior APCO written permission.

[District Rule 1302]

4.This engine shall not be operated unless all of the following engine systems are properly functioning:

- a. Air-to-Fuel Ratio Controller
- b. Oxygen Sensor
- c. Non-Selective Catalytic Reduction

Furthermore, no changes shall be made to any of the above systems unless done so by a factory certified technician or as allowed with prior APCO written permission.

[District Rule 1302]

5.The Air-to-Fuel Ratio Controller shall be used in conjunction with the control device, and shall be maintained and operated appropriately to ensure proper operation of the engine and control device to minimize emissions at all times.

[40 CFR 60.4243]

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 information specified below:

- a. Monthly and annual fuel usage in cubic feet or therms;
- b. Engine maintenance plan, as required in 40 CFR 60.4243(a)(2)(iii);
- c. Records of all maintenance and repair actions performed on the engine, the AFRC, and the three-way catalyst, including date and description;
- d. Results of all engine inspections as required in condition #10; and

e. Documentation from the manufacturer that the engine is certified to meet the emission standards as required in 40 CFR Part 60, Subpart JJJJ, and District Rule 1160 as applicable.
[District Rule 1160; 40 CFR Part 60, Subpart JJJJ]

6. This unit shall be limited to emergency use only, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 100 hours per year for testing and maintenance.
[40 CFR 60.4243(d), District Rule 1302]

6. The air-to-fuel ratio controller shall be used in conjunction with the operation of the three-way catalyst, and shall be maintained and operated appropriately to ensure proper operation of the engine and control device to minimize emissions at all times.
[40 CFR 60.4243(g), Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines]

7. 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. Date of each use and duration of each use (in hours);
 - b. Reason for use (testing & maintenance, emergency, required emission testing);
 - c. Calendar year operation in terms of fuel consumption in standard cubic feet or total hours;
 - d. The date and a summary of any emissions corrective maintenance taken; and
 - e. Records of all maintenance and repair actions performed on the engine, including any calibrations carried out on the AFRC.
- [40 CFR 60.4245, District Rule 1320]

7. In the event that the three-way catalyst is replaced, the new (replacement) three-way catalyst must be of the same manufacturer and model designation and it must be installed by factory certified personnel. Furthermore, the District must be notified within twenty-four (24) hours of the replacement via email to engineering@mdaqmd.ca.gov.

If the manufacturer or the Model designation of the new (replacement) three-way catalyst is not identical to the original three-way catalyst or if the unit is not installed by factory certified personnel, then the engine shall be source tested in accordance with the procedures outlined in 40 CFR 60.4244 and/or District Rule 1160 within 90 days after the catalyst replacement. The source test results must verify that the engine meets the following maximum emission limits (measured at standard conditions):

- a. NOx: 50 ppmvd (District Rule 1160);
 - b. VOC: 0.70 g/bhp-hr (40 CFR 60.4233(e)); and
 - c. CO: 2.0 g/bhp-hr (40 CFR 60.4233(e)).
- [District Rules 204 and 1160; 40 CFR 60.4243, 40 CFR 60.4244]

8. This equipment may operate in response to an impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time. The engine may be operated no more than 30 minutes prior to the forecasted outage and must be shut down immediately after the utility advises that the outage is no longer imminent or in effect.
[40 CFR 60.4243]

8. This engine is subject to the requirements of the New Source Performance Standards (NSPS) for Stationary Spark Ignition IC Engines (40 CFR 60, Subpart JJJJ) and District Rule 1160 - Internal Combustion Engines. In the event of conflict, the more stringent requirement(s) shall govern.
[District Rule 1160; 40 CFR Part 60, Subpart JJJJ]

9. This equipment shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.
[40 CFR 60.4243]

9. The owner/operator must comply with the emission standards under 40 CFR Part 60, Subpart JJJJ and District Rule 1160(C)(1) over the entire life of the engine.

Maximum Allowable Emission Standards:

- a. NOx: 50 ppmvd (District Rule 1160);
- b. VOC: 0.70 g/bhp-hr (40 CFR 60.4233(e)); and
- c. CO: 2.0 g/bhp-hr (40 CFR 60.4233(e)).

[NOx emission rate is from District Rule 1160, VOC and CO emission standards are from Table 1 to Subpart JJJJ of Part 60]

Documentation from the manufacturer stating that the engine is certified to meet the emission standards must be retained on-site (or at a central location) and shall be provided to District, State and Federal personnel upon request.

[District Rule 1160; 40 CFR Part 60.4233(e) and 60.4245(a)]

10.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]

10.This engine must be inspected at least once each quarter or after every 2,000 hours of operation, whichever is more frequent. An inspection includes any testing, maintenance, and/or other procedures that ensure the engine is operated in strict accordance with the manufacturer's specifications and in continual compliance with the provisions of District Rule 1160. Records of such inspections must include the following information as a minimum:

- a. Inspection date;
- b. Records of testing, as applicable; and
- c. Records of maintenance.

[District Rule 1160(E)(1)(a)]

11.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]