



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

B015206

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: OCTOBER 2026

OWNER OF OPERATOR (Co.#2752)

Cadiz Inc.
550 S. Hope, #2850
Los Angeles, CA 90071

EQUIPMENT LOCATION (Fac.#4177)

Cadiz Ranch
1500 Cadiz Road, Well 26N
Cadiz, CA 92304

Description:

NATURAL GAS IC ENGINE, AGRICULTURAL (REMOTELY LOCATED) consisting of: A prime use, rich-burn, spark ignition internal combustion engine used for agricultural operations. This 600 bhp uncertified engine was manufactured in 2024. Exhaust flow is approximately 2462 scfm at 1010 degrees Fahrenheit through a 11 foot high by 8 inch diameter stack. This engine is equipped with factory-installed emission controls.

One Caterpillar, NG fired internal combustion engine Model No. CG137-12 and Serial No. TBD, Three-Way Catalyst (also NSCR), Four-Stroke Rich Burn, After Cooled, Air-To-Fuel Ratio Controller, Carbureted, Engine/Powertrain Control Module, Spark-Ignited, Turbo Charged, producing 600 bhp with 12 cylinders at 1800 rpm while consuming a maximum of 4.44 MMBtu/hr. This equipment powers a TBD Pump Model No. TBD and Serial No. TBD, rated at TBD.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	2.0	gm/bhp-hr
NOx	0.5	gm/bhp-hr
PM10	0.032	gm/bhp-hr
PM2.5	0.032	gm/bhp-hr
SOx	0.005	gm/bhp-hr
VOC	0.7	gm/bhp-hr

Fee Schedule: 1 (c)

Rating: 600 bhp

SIC: 182

SCC: 20200253

Location/UTM(Km):
639E/3816N

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.

Cadiz Inc.
550 S. Hope, #2850
Los Angeles, CA 90071

By: **COPY**
Brad Poiriez
Executive Director

CONDITIONS:

1. This spark-ignited, internal combustion engine and its associated control device (three-way catalyst) and air-to-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.

[District Rule 204 and 1160.1(F)(4)(a); 40 CFR 60.4243]

2. This unit shall only be fired on PUC regulated Pipeline quality natural gas fuel.

[District Rules 431 and 1302]

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 1160.1(F)(4)(c)]

4. 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. Date and duration of each use (in hours);

b. Monthly and calendar year operation in terms of total hours;

c. Engine maintenance plan, as required in 40 CFR 60.4243(a)(2)(iii);

d. Records of all maintenance and repair actions performed on the engine, the air/fuel ratio controller, and the three-way catalyst, including date and description;

e. Results of all engine compliance/performance tests as required in condition #9; and,

f. Results of all notifications (including supporting documentation) as required in condition #7.

[District Rules 1160.1 and 1302; 40 CFR 60.4243 and 40 CFR 60.4245]

5. 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)]

6. 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 1160.1 - Internal Combustion Engines in Agricultural Operations. In the event of conflict, the more stringent requirement(s) shall govern.

[District Rule 1160.1; 40 CFR Part 60, Subpart JJJJ]

7. Pursuant to 40 CFR 60.4245(c), the owner/operator shall submit an initial notification of the date that installation of this engine commenced. The notification shall be postmarked/date-stamped no later than 30 days after the date that installation of the engine commenced, and must contain the following information:

a. Name and address of the owner/operator;

b. Address where the engine resides;

c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

d. Emission control equipment; and,

e. Fuel used.

All notifications must be submitted electronically to the District via reporting@mdaqmd.ca.gov. All notifications must be submitted to USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the USEPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).

[District Rule 204; 40 CFR 60.4245(c)]

8. Pursuant to 40 CFR Part 60 Subpart JJJJ, and in order for this engine to not exceed the daily BACT threshold of District Rule 1303, the owner/operator must comply with the following emission standards, as referenced below, over the entire life of the engine. Compliance must be demonstrated through an compliance/performance test. The compliance testing must be conducted for NOX, VOC,

CO and oxygen (O₂) levels in accordance with the provisions of the District's Compliance Test Procedural Manual and 40 CFR 60.4244. Emissions values must not exceed the following:

Maximum Allowable Emission Standards:

- a. NO_x: 0.5 g/bhp-hr (BACT-based limitation);
- 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 Rule 1303; 40 CFR Part 60.4233(e) and 60.4245(a)]

9. In order to demonstrate compliance with the emission standards outlined in condition 8, the owner/operator (o/o) shall conduct an initial compliance/performance test within nine hundred and eighty (180) days of startup of this engine. Subsequent compliance/performance testing, verifying continued compliance with this limitation, shall be conducted once in every 8,760 hours or 3 years, whichever comes first, thereafter. The compliance/performance testing shall be conducted in accordance with the provisions of the District's Compliance Test Procedural Manual and 40 CFR 60.4244.

The owner/operator must provide a written compliance/performance test plan or protocol at least thirty days prior to the test date. The owner/operator must conduct all required compliance/performance 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/performance test date so that an observer may be present.

The final compliance/performance test results must be submitted to the District and USEPA not later than sixty (60) days after the compliance/performance test date. All compliance/performance test notifications, protocols, and results must be submitted electronically to the District via reporting@mdaqmd.ca.gov. All compliance/performance test results must be submitted to USEPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the USEPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).

[District Rule 1303; 40 CFR 60.4245(f)]

10. 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 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. NO_x: 0.5 g/bhp-hr;
- b. VOC: 0.70 g/bhp-hr; and,
- c. CO: 2.0 g/bhp-hr.

[District Rule 1303; 40 CFR 60.4243, 40 CFR 60.4244]

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; 17 CCR 93400-93410; and 40 CFR 51, Subpart A]