



## MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

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

**INACTIVE**

**B000269**

Inactive type Permit has no description information.

**EXPIRES LAST DAY OF: SEPTEMBER 2014**

### **OWNER OF OPERATOR (Co.#133)**

NASA/Goldstone  
93 Goldstone Rd.  
Fort Irwin, CA 92310

### **EQUIPMENT LOCATION (Fac.#611)**

NASA/Goldstone Deep Space Communications Complex  
Goldstone Lake  
Fort Irwin, CA 92311

#### **Description:**

DIESEL IC ENGINE (UNIT #5) @ ECHO SITE consisting of: @ Building G-24, Yr of Mfg 1973/74,

One Caterpillar, Diesel fired internal combustion engine Model No. 398 and Serial No. 67B2324, producing 875 bhp with 8 cylinders at 1800 rpm while consuming a maximum of 26.0 gal/hr. This equipment powers a Generator Model No. and Serial No., rated at 600 kW(e).

#### **CONDITIONS:**

1. A working computer program shall be used to monitor all power plant generator NOx emissions on an hourly, daily, monthly and a running year (the last 365 days) basis. NOx emissions from all of the engines regardless of use (emergency, critical tracking or peak clipping) shall not exceed 2000 pounds per day or 250 tons per year (as a running total for the preceding 364 day period plus the current day's operation). As engines are tested, the most recent engine specific emissions factor shall be used to determine emissions for that engine; for engines not yet tested the highest emissions factor from like model engine tests shall be used.

2. This equipment shall be installed, operated and maintained in strict accord 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]

3. This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15) on a weight per weight basis per CARB Diesel or equivalent requirements. [Title 17 CCR 93115.5(a)]

4. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this unit to indicate elapsed engine operating time. (Title 17 CCR 93115.10(e)(1))

Fee Schedule: 1 (c)

Rating: 875 bhp

SIC: 9661

SCC: 20100102

Location/UTM(Km): 517E/3906N

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.

NASA/Goldstone  
93 Goldstone Rd.  
Fort Irwin, CA 92310

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

5. The owner/operator (o/o) shall maintain a 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 of each use and duration of each use (in hours);
  - b. Engine with load factor
  - c. Dates of routine maintenance
  - d. Dates of major repairs and/or replacements
  - e. Operator's name
  - f. Source of emission data shall be cited either manually or as part of the computer program report of daily emissions, e.g. Test Report T1686, August 12, 1993.
- b. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- c. Fuel sulfur concentration (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
6. The Diesel Particulate Matter emission from this diesel ICE must comply with one of the three following options by the appropriate compliance date in either Conditions 8 or 10:
- Option 1. 85% reduction in emissions from baseline levels.
- Option 2. 0.01 g/bhp hr
- Option 3. 30% reduction in emissions from baseline levels by 1/1/2006 and 0.01 g/bhp hr by 7/1/2011. (Title 17 CCR \S93115.7(b)1. - See Table #4)
7. The hydrocarbon (HC), oxides of nitrogen (NOX), non-methane hydrocarbons plus NOX (NMHC+NOx) and carbon monoxide (CO) emissions from this diesel ICE must comply with one of the three following options by the appropriate compliance date in either condition 8 or 10:
- Option 1. Use verified emission control strategy.
- Option 2. Emissions standards for off-road engines of the same model year and rated power as specified in 13 CCR \S2423 or "Tier 1" standards if no such standards exist.
- Option 3. No more than 10% increase in HC or NOx from baseline or no increase in NMHC+NOx from baseline AND no more than 10% increase in CO from baseline. (Title 17 CCR \S93115.7(b)2. - See Table #4)
8. Since this equipment is remotely located (more than 1 mile from another receptor) and the prioritization score is less than 1.0 and/or the cancer risk is less than 1.0 in a million and the hazard index is less than 0.1 the equipment must comply with Conditions 6 & 7 on or before January 1, 2011. (Title 17 CCR \S93115.3(p))
9. The o/o must notify the District within five (5) days after becoming aware that the exemption in Condition 8 no longer applies. [Title 17 CCR 93115.10(d)(1)]
10. The o/o of this equipment shall demonstrate compliance with the requirements of Conditions 6 and 7 within 180 days of notifying the District or notification from the District of the loss of the exemption of Condition 8 no longer applies. [Title 17 CCR 93115.10(d)(1)(A)]
11. The o/o must submit the required control strategy to the District for compliance with emissions limitation 6 months prior to the appropriate compliance date(s) in either Conditions 8 or 10 for the engine. ([Title 17 CCR 93115.10(a)(4)]
12. The o/o must submit the required emissions data to the District prior to appropriate compliance dates(s) in either Condition 8 or 10 for the engine. ([Title 17 CCR 93115.10(c)(2)]
13. Install backpressure monitor if engine is equipped with Diesel PM filter. (Title 17 CCR \S93115.10(e)(2))
14. This diesel fired ICE is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary compression Ignition Engines. In the event of conflict between these conditions and the ATCM, the most stringent requirements shall govern [Title 17 CCR 93115 and District Rule204].

15.This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.

16.Per the MDAQMD approved ATCM Compliance Plan dated October 11, 2008 and revised February 11, 2009 this prime permitted engine must be changed to an emergency engine and the Uninterruptible Power Supply (UPS) system must be operational on or before January 1, 2011.