MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

INACTIVE

B008026

Inactive type Permit has no description information.

EXPIRES LAST DAY OF: FEBRUARY 2014

OWNER OF OPERATOR (Co.#508)

Union Pacific Railroad Co
2015 S Willow St. Manager of Env Field Ops
Bloomington, CA 92316

EQUIPMENT LOCATION (Fac.#2272)

Union Pacific Railroad - Mile Pole 213.6
Balch #1 near
Kelso, CA 92309

Description:
DIESEL IC ENGINE, GENERATOR (BALCH #1) consisting of: with a 2000 gallon diesel day tank

One Caterpillar, Diesel fired internal combustion engine Model No. 3406 and Serial No. TBD, Direct Injected, Turbo Charged, After Cooled, Inter Cooled, producing 475 bhp with 6 cylinders at 1500 rpm while consuming a maximum of 17.0 gal/hr. This equipment powers a Franklin Electric Pump Model No. 2391046004 and Serial No. NULL, rated at 100 hp submersible pump.

EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	1.75	lbs/hr
NOx	5.96	lbs/hr
PM10	0.57	lbs/hr
SOx	0.12	lbs/hr
VOC	0.55	lbs/hr

CONDITIONS:

1. This 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 in a manner consistent with safety and good air pollution control practices for minimizing emissions. 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 63.6605(a)]

Fee Schedule: 1 (c) | Rating: 475 bhp | SIC: 4013 | SCC: 20200102 | Location/UTM(Km): 624E/3877N

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.

Union Pacific Railroad Co
2401 E. Sepulveda Blvd.

Long Beach, CA 90810

By: **COPY**
Eldon Heaston
Air Pollution Control Officer

2. This unit shall only be fired on diesel fuel that meets the following requirements, or an alternative fuel approved by the ATCM for Stationary CI Engines:

a. Ultra-low sulfur concentration of 0.0015% (15 ppm) or less, equal to a weight per weight basis; and,
b. A cetane index or aromatic content, as follows:
i. A minimum cetane index of 40; or,
ii. A maximum aromatic content of 35 volume percent.
[Title 17 CCR 93115.5(a) and 40 CFR 63.6604]

3. 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(d)]

4. The Diesel Particulate Matter emission from this diesel engine must be equal to or less than 0.01 grams per brake horsepower-hour.
[17 CCR \S93115.7(b)]

5. This engine shall not be operated in excess of the following operational limits, verified by timer settings, hour meter readings and documented changes to timer settings:
a. 3 hours per calendar day (4 hours in year 2001 only)
b. 1095 hours per calendar year (1460 hours in year 2001 only)

6. This unit is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the one of the following compliance options:

a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O2; or,
b. Reduce CO emissions by 70 percent or more.
[40 CFR 63.6603(a)]

7. To comply with condition 6 (40 CFR 63.6603(a)) by meeting the CO concentration limit in this stationary RICE exhaust to 49 ppmvd at 15 percent O2, the following performance test requirements must be met:

a. Select the sampling port location and the number of traverse points; and,
i. Method 1 or 1A of 40 CFR part 60, appendix A \S63.7(d)(1)(i)
(a) If using a control device, the sampling site must be located at the outlet of the control device.
b. Determine the O2 concentration of the stationary RICE exhaust at the sampling port location; and,
i. Method 3 or 3A or 3B of 40 CFR part 60, appendix A, or ASTM Method D6522Â–00 (2005)
(a) Measurements to determine O2concentration must be made at the same time and location as the measurements for formaldehyde concentration.
c. Measure moisture content of the stationary RICE exhaust at the sampling port location; and,
i. Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348Â–03
(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration
d. Measure formaldehyde at the exhaust of the stationary RICE; or,
i. Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348Â–03*, provided in ASTM D6348Â–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130
(a) Formaldehyde concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
e. Measure CO at the exhaust of the stationary RICE.
i. Method 10 of 40 CFR part 60, appendix A, ASTM Method D6522Â–00 (2005), Method 320 of 40 CFR part 63, appendix A, or ASTM D6348Â–03
(a) CO Concentration must be at 15 percent O2, dry basis. Results of this test consist of the average of the three 1-hour longer runs

*You may also use Methods 3A and 10 as options to ASTMÂ–D6522Â–00 (2005). You may obtain a copy of ASTMÂ–D6522Â–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428Â–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTMÂ–D6522Â–00 (2005) may be used to test both CI and SI stationary.

8. To comply with condition 6 (40 CFR 63.6603(a)) by reducing CO emissions by 70 percent or more, the following performance test requirements must be met:

a. Measure the O2 at the inlet and outlet of the control device; and,
(1) Using a portable CO and O2analyzer
(a) Using ASTM D6522Â–00 (2005)*(incorporated by reference, see \S63.14). Measurements to determine O2must be made at the same time as the measurements for CO concentration.
b. Measure the CO at the inlet and the outlet of the control device.
(1) Using a portable CO and O2analyzer
(a) Using ASTM D6522Â–00 (2005)* **(incorporated by reference, see \S63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O2, dry basis.

*You may also use Methods 3A and 10 as options to ASTMÂ–D6522Â–00 (2005). You may obtain a copy of ASTMÂ–D6522Â–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428Â–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTMÂ–D6522Â–00 (2005) may be used to test both CI and SI stationary RICE.
**You may also use Method 320 of 40 CFR part 63, appendix A, or ASTM D6348Â–03.

9. This engine must comply with one of the compliance options listed in condition 6 no later than 180 days after May 3, 2013.
[40 CFR 63.6612(a)]

10. An owner or operator is not required to conduct an initial/compliance demonstration performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described below:

a. The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
b. The test must not be older than 2 years.
c. The test must be reviewed and accepted by the Executive Director.
d. Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
[40 CFR 63.6612(b)]

11. If this unit will demonstrate compliance by reducing CO emissions pursuant to condition 8, without using an oxidation catalyst, the owner/operator must petition the Executive Director for operating limitations pursuant to 40 CFR 63, subpart ZZZZ, section 63.6620(g).
[40 CFR 63.6620(f)]

12. The owner/operator must conduct subsequent performance tests every 8,760 hours or every three (3) years, which ever comes first, pursuant to:

a. Condition 7, for units demonstrating compliance by meeting the CO concentration limit; or,
b. Condition 8, for units demonstration compliance by reducing CO emissions.

If this unit has not operated within a three-year (3) period, it is not required that this unit be started up solely to conduct the performance test; as, the performance test can be conducted when the engine is started up again for operational use.
[40 CFR 63.6620(a)]

13. The performance test requirements specified in conditions 7 and 8 must be notified, conducted, calculated and reported in accordance with 40 CFR 63, Subpart ZZZZ, section 63.6620.

14. The owner/operator must submit a Notification of Intent at least 60 days before the performance tests required by conditions 7 and 8 are scheduled, pursuant to 40 CFR 63.7.
[40 CFR 63.6645]

15. The owner/operator must submit a Notification of Compliance Status at least 60 days after the completion of the performance test required by conditions 7 and 8, pursuant to 40 CFR 63.10(d)(2).
[40 CFR 63.6645(h)]

16. If this unit is not equipped with a closed crankcase ventilation system, the owner/operator must comply with one of the requirements below:

a. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere; or,
b. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

The owner/operator must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements.
[40 CFR 63.6625(g)]

17. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625 (h)]

18. The owner/operator must submit semi-annual Compliance reports pursuant to the requirements below:
a. The first Compliance report must cover the period beginning on the compliance date of May 3, 2012 and ending on June 30, 2012.
b. Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

Each Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever is applicable to the above requirements.
[40 CFR 63.6650(b)]

19. The Compliance report as mentioned above in condition 18, must contain the following information:
a. Company name and address.
b. Statement by a responsible official, with that official s name, title, and signature, certifying the accuracy of the content of the report
c. Date of report and beginning and ending dates of the reporting period.
d. If you had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in 40 CFR 63.10(d)(5)(i).
1. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
2. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
[40 CFR 6303350(c) and (d)]

20. The owner/operator shall maintain a operations log for this unit current and on-site (or at a central location) for a minimum of three (3) 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 total hours; and,
b. Fuel sulfur concentration and cetane index, as required by condition 2 (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log).
c. A copy of each notification and Compliance report that you submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
d. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
e. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
f. Records of all required maintenance performed on the air pollution control and monitoring equipment.
g. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[17 CCR 93115, ATCM for Stationary Compression Engines and 40 CFR 63.6655(a)]

21. The facility must submit accurate emissions inventory data to the District, in a format approved by the District, upon District request.

22. This diesel engine is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) and 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (NESHAP).