



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

E012226

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: JUNE 2025

OWNER OF OPERATOR (Co. #1)

CEMEX Construction Materials Pacific LLC
16888 North E Street
Victorville, CA 92392

EQUIPMENT LOCATION (Fac. #5)

CEMEX - Black Mountain Quarry Plant
25220 Black Mountain Quarry Road
Apple Valley, CA 92307

Description:

DIESEL IC ENGINE, EMERGENCY GENERATOR consisting of: EPA and CARB Certified Tier IVi Engine, Date of Manufacture: 04-2014; Engine Replaces Emergency ICE Previously Permitted as E009246. This engine provides rotation to the Kiln Q3.

One John Deere, Diesel fired internal combustion engine Model No. 4045TF290 and Serial No. PE4045R943712, Turbo Charged, producing 75 bhp with 4 cylinders at 2200 rpm while consuming a maximum of 33 lbs/hr. This equipment powers a Mechanical Gearbox Other Model No. 2180YN2-LS and Serial No. Unknown, rated at TBD.

EMISSIONS RATES

| Emission Type | Est. Max Load | Unit |
|---------------|---------------|----------|
| CO | 5.0 | gm/Kw-hr |
| NOx | 0.4 | gm/Kw-hr |
| NOx+NMHC | 0.59 | gm/Kw-hr |
| PM10 | 0.02 | gm/Kw-hr |

CONDITIONS:

Fee Schedule: 7 (g) Rating: 1 device SIC: 3241 SCC: 20100102 Location/UTM(Km): 476E/3826N

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.

CEMEX Construction Materials Pacific
LLC
16888 North E Street
Victorville, CA 92392

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

1.This certified stationary compression-ignited internal combustion engine 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 air 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 60.4211(a)]

1.This certified stationary compression-ignited internal combustion engine 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 air 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 60.4211(a)]

2.A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[17 CCR 93115.10(d)]

2.A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.
[District Rule 204; 17 CCR 93115.10(d)]

3.This equipment 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, on 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.

[17 CCR 93115.5(a) and 40 CFR 60.4207(b)] Note: Use of CARB certified ULSD fuel satisfies these requirements.

3.This equipment 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, on 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.

Note: Use of CARB certified ULSD fuel satisfies these requirements.

[17 CCR 93115.5(a) and 40 CFR 60.4207(b)]

4.This engine shall be limited to use for emergency power, defined as in response to a fire or flood, or when commercially available power has been interrupted. In addition, this engine shall be operated no more than 50 hours per year for testing and maintenance. Engine operation for emergency use and for emission testing to show compliance with 93115.6(a)(3) does not count toward the testing and maintenance limit of 50 hours per year.

[17 CCR 93115.6(a)(3)(1)(c)]

4.This engine shall be limited to use for emergency power, defined as in response to a fire or flood, or when commercially available power has been interrupted. In addition, this engine shall be operated no more than 50 hours per year for testing and maintenance. Engine operation for emergency use and for emission testing to show compliance with 93115.6(a)(3) does not count toward the testing and maintenance limit of 50 hours per year.

[District Rule 204; 17 CCR 93115.6(a)(3)(1)(c)]

5.The owner/operator shall maintain an operations log for this engine 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 following information: a. Date of each use and duration of each use (in hours); b. Reason for use (testing & maintenance, emergency, required emission testing, etc.); c. Monthly and rolling 12 month period operation in terms of fuel consumption (in gallons) or total hours; d. Fuel sulfur concentration as required by condition #3 (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log); and, e. Maintenance performed on this equipment.

5.The owner/operator shall maintain an operations log for this engine 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 following information: a. Date of each use and duration of each use (in hours); b. Reason for use (testing & maintenance, emergency, required emission testing, etc.); c. Monthly and rolling 12 month period operation in terms of fuel consumption (in gallons) or total hours; d. Fuel sulfur concentration as required by condition #3 (the o/o may use the supplier's certification of sulfur content if it is maintained as part of this log); and, e. Maintenance performed on this equipment.

[District Rule 204; 17 CCR 93115.10(f)]

6.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.

[17 CCR 93115.6(a)(2)]

6.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.

[District Rule 204; 17 CCR 93115.6(a)(2)]

7.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.

[17 CCR 93115.6(c)(1)(C)]

7.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.

[District Rule 204; 17 CCR 93115.6(c)(1)(C)]

8.This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS). In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.

[District Rule 1302]

8.This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS). In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.

[District Rule 1302]

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; 40 CFR 51, Subpart A]

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

[District Rule 204]

10.The combined emissions from all permitted combustion source, including but not limited to Kilns Q2 and Q3 and Burners on Roll Press 1 and 2, on any fuel or mix of fuels, shall not exceed the following daily (midnight to midnight) limits, calculated on a rolling thirty

(30) day arithmetic average basis:

- a. NO_x - 42,207 lbs (verified by CEMS and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources)
 - b. NO_x - 19,314 lbs (verified by CEMS and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources) on and after October 1, 2009
 - c. SO_x - 4,220 lbs (verified by CEMS and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources)
 - d. CO - 27,522 lbs (verified by CEMS and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources)
 - e. VOC - 2,139 lbs (verified by annual source test and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources)
 - f. Main Stack TSP - 1,435 lbs (verified by annual source test and CERMS for kiln and Source Test and Production Logs for Roll Press Burners and other combustion sources)
 - g. Clinker Cooler Stack TSP (Q2 clinker cooler only) - 699 lbs (verified by annual source test and clinker production)
 - h. Use vendor emission data to quantify emissions from this device.
- [Rule 204, 40 CFR 52.220(c)(39)(ii)(B)]