

20 August 2012

Thomas Walsh, President
Cumberland Quarry Corporation
P.O. Box 117
Manville, RI 02838

Dear Mr. Walsh:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for the installation of fuel burning equipment and rock crusher at your facility located at 6 Manville Hill Road, Cumberland.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 2182).

The portable rock crusher powered by a diesel engine/generator was installed in 2010 without first obtaining a preconstruction permit as required by RI Air Pollution Control Regulation No. 9. A Notice of Violation, which was issued by the Department of Environmental Management in February 2011 which was settled via a Consent Agreement in April 2011. The issuance of this minor source permit brings the Cumberland Quarry Corporation into compliance with the requirement to obtain a preconstruction permit for this unit.

Be advised that the diesel engine that powers the portable rock crusher may be subject to the requirements of 40 CFR 63, Subpart ZZZZ, "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines". If applicable, you must comply with the emission limitations and operating limitations in this federal regulation no later than **May 3, 2013**. Compliance with this regulation may require you to install air pollution control equipment on the diesel engine. The USEPA enforces this regulation. If you have any questions concerning the applicability of the regulation to emission units at your facility you should contact either Roy Crystal (E-mail: Crystal.Roy@epa.gov, Phone: 617-918-1745) or Susan Lancey (E-mail: Lancey.Susan@epa.gov, Phone: 617-918-1656) in the Region 1 of EPA.

If there are any questions concerning this permit, please contact me at 222-2808, extension 7415.

Sincerely,

Carlene B. Newman
Air Quality Specialist
Office of Air Resources

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

CUMBERLAND QUARRY CORPORATION

APPROVAL NO. 2182

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Cumberland Quarry Corporation

For the following:

Installation of a Caterpillar 6.82 MMBtu/hr, 891 HP generator, Model No. 3412. The diesel engine powers a Cedar Rapids 250 tph Rock Crusher. The diesel engine shall be fired with diesel fuel oil containing 0.0015 percent sulfur, by weight, or less.

Located at: *Cumberland Quarry Corporation*

6 Manville Hill Road, Cumberland

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Cumberland Quarry Corporation* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

**Douglas McVay, Chief
Office of Air Resources**

Date of Issuance

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

Permit Conditions and Emission Limitations

CUMBERLAND QUARRY CORPORATION

Approval No. 2182

A. Emission Limitations

1. Nitrogen Oxides (as nitrogen dioxide (NO₂))

The emission rate of nitrogen oxides discharged to the atmosphere from the generator engine shall not exceed 4.05 lb per million BTU heat input or 27.62 lb/hr, whichever is more stringent.

2. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from the generator engine shall not exceed 0.87 lb per million BTU heat input or 5.95 lb/hr, whichever is more stringent.

3. Sulfur Dioxide (SO₂)

- a. All fuel burned in the generator engine shall contain no more than 0.0015 percent sulfur by weight.
- b. The emission rate of sulfur dioxide discharged to the atmosphere from the generator engine shall not exceed 1.83 lb/hr.

4. Particulate Matter

The emission rate of particulate matter discharged to the atmosphere from the generator engine shall not exceed 0.29 lb per million BTU heat input or 1.96 lb/hr, whichever is more stringent.

5. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from the generator engine shall not exceed 0.33 lb per million BTU heat input or 2.23 lb/hr, whichever is more stringent.

6. Opacity

Visible emissions from the generator engine shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one hour. This visible emission limitation shall not apply during startup of an engine. Engine startup shall be defined as the first ten minutes of firing following the initiation of firing.

B. Operating Requirements

1. The maximum firing rate of the generator engine shall not exceed 48.7 gal/hr of diesel fuel oil.
2. The generator engine shall not operate more than 2000 hours in any 12 month period.

C. Continuous Monitors

1. The generator engine shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time.

D. Fuel Oil Testing

1. Compliance with the fuel oil sulfur limits may be determined based on a certification from the fuel supplier. Fuel supplier certifications shall include the following information:
 - a. The name of the fuel supplier;
 - b. The sulfur content of the fuel from which the shipment came or the shipment itself;
 - c. The location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to Cumberland Quarry Corporation or whether the sample was drawn from fuel storage at the fuel supplier's facility or another location; and
 - d. The method used to determine the sulfur content of the fuel.
2. As an alternative to fuel supplier certification, the owner/operator may elect to sample the fuel prior to combustion. Sampling and analysis shall be conducted for the fuel in the initial tank(s) of fuel to be fired in each fuel burning device and

after each new shipment of fuel received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted.

3. Each fuel supplier certification or each fuel oil analysis must demonstrate that the oil contains 0.0015 percent sulfur by weight or less.

E. Record Keeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine and record the hours of operation for the generator engine for the previous 12 month.
2. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceeds 2000 hours for the generator engine.
3. The owner/operator shall retain copies of all fuel supplier certifications and/or all fuel oil analyses. These records shall be made accessible for review by the Office of Air Resources or EPA. These records shall include a certified statement, signed by the owner/operator of the facility, that the records represent all the fuel combusted in the generator engine.
4. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
5. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;
 - b. The subject source(s) that caused the noncompliance with the permit term;
 - c. The time and date of first observation of the incident of noncompliance;
 - d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate;
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.

6. The owner/operator shall notify the Office of Air Resources in writing of any physical or operational change to any equipment that would:
 - a. Change the representation of the facility in the application.
 - b. Alter the applicability of any state or federal air pollution rules or regulations.
 - c. Result in the violation of any terms or conditions of this permit.
 - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

7. All records required as a condition of this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

F. Fugitive Dust

1. No visible fugitive emissions shall leave the property from the rock crusher, associated sources and service roads within the facility. Compliance with the standard of no visible fugitive emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined using 40 CFR 60, Appendix A, Test Method 22.
2. Opacity of visible emissions from the rock crusher shall not exceed 12 percent. Truck dumping of nonmetallic mineral into the rock crusher is exempt from this requirement. Testing to determine compliance with the opacity limitation shall be performed per 40 CFR 60, Appendix A, Test Method 9, 40 CFR 60.11 and 40 CFR 60.675.
3. Service roads within the facility shall be maintained and controlled in such a manner as to minimize the potential for the generation of fugitive dust emissions.

4. All open storage areas and/or piles of material which may produce fugitive dust shall be covered, watered down, or implement other precautions, as necessary, to prevent generation of dust.
5. Adequate precautions shall be taken to prevent fugitive dust emissions from the storage, handling or transporting of material capable of releasing dust.

G. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable federal and state laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.
2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.
4. The owner/operator is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). Compliance with all applicable provisions therein is required.