12 April 2007

Mr. Daniel W. Clark
Manager, Logistics
St. Lawrence Cement, US Division
3 Columbia Circle
Albany, NY 12203

Dear Mr. Clark:

The Department of Environmental Management, Office of Air Resources, has reviewed and approved your application for the installation of a pneumatic ship unloader at your cement distribution terminal located in Providence, RI.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval Nos. 1974-1982).

I can be reached at 222-2808, extension 7011 if there are any questions.

Sincerely,

Douglas L. McVay
Associate Supervising Engineer
Office of Air Resources

cc: Providence Building Official
Peter H. Guldberg, C.C.M. – Tech Environmental

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

MINOR SOURCE PERMIT

ST. LAWRENCE CEMENT CO., LLC

APPROVAL NOs. 1974-1982

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

St. Lawrence Cement Co., LLC

For the following:

The installation of a Van Aalst-Son barge-mounted pneumatic ship unloader. The unloader is equipped with a Van Aalst-Son Bulk Handling Dust Collector, Model Compact Type 13.0,(Approval No. 1974) to control particulate emissions during the cement unloading process and eight Caterpillar diesel engines. Five ModelC9-DITA, 310 HP units servicing vacuum pumps (Approval Nos. 1975-1979), two Model C18-DITA, 575 HP units servicing air compressors (Approval Nos. 1980 & 1981) and one Model C-18-DITA, 575 HP engine-generator set (Approval No. 1982).

Located at: *139 Terminal Road, Providence*

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 *St. Lawrence Cement Co., LLC* **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.**

Stephen Majkut, 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

ST. LAWRENCE CEMENT CO., LLC

APPROVAL NOs. 1974-1982

A. Emission Limitations

1. Ship unloader dust collector

a. Particulate Matter

(1) The concentration of particulate matter discharged to the atmosphere from each dust collector stack shall not exceed 0.02 grains per actual cubic foot.

(2) The emission rate of particulate matter discharged to the atmosphere from all dust collector stacks combined shall not exceed 1.46 pounds per hour.

(3) Particulate emissions treated by the dust collector shall be reduced by 99.9 % or greater before discharge to the atmosphere.

b. Opacity

Visible emissions from each dust collector stack shall not exceed 10% opacity (six-minute average).

2. Ship unloader engine-vacuum pump sets – 310 bhp

a. Nitrogen Oxides (NO_x)

The emission rate of nitrogen oxides discharged to the atmosphere from each engine-vacuum pump set shall not exceed 3.45 grams/bhp-hr unless the rate of emissions is less than 2.28 lbs/hr.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from each engine-vacuum pump set shall not exceed 4.07 grams/bhp-hr unless the rate of emissions is less than 2.02 lbs/hr.

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from each engine-vacuum pump set shall not exceed 2.56 grams/bhp-hr unless the rate of emissions is less than 0.43 lbs/hr.

d. Sulfur Dioxide (SO_2)

(1) All diesel fuel burned in each engine-vacuum pump set shall contain no more than 0.05 percent sulfur by weight.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from each engine-vacuum pump set shall not exceed 0.11 lbs/hr.

e. Particulate Matter (PM)

The emission rate of particulate matter discharged to the atmosphere from each engine-vacuum pump set shall not exceed 0.65 grams/bhp-hr unless the rate of emissions is less than 0.11 lbs/hr.

f. Opacity

Visible emissions from each engine-vacuum pump set 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 five minutes of firing following the initiation of firing.

3. Ship unloader engine-air compressor sets and engine/generator set – 575 bhp

a. Nitrogen Oxides (NO_x)

The emission rate of nitrogen oxides discharged to the atmosphere from each 575 bhp engine shall not exceed 3.82 grams/bhp-hr unless the rate of emissions is less than 4.85 lbs/hr.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from each 575 bhp engine shall not exceed 1.36 grams/bhp-hr unless the rate of emissions is less than 1.72 lbs/hr.

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from each 575 bhp engine shall not exceed 0.32 grams/bhp-hr unless the rate of emissions is less than 0.20 lbs/hr.

d. Sulfur Dioxide (SO_2)

(1) All diesel fuel burned in each 575 bhp engine shall contain no more than 0.05 percent sulfur by weight.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from each 575 bhp engine shall not exceed 0.21 lbs/hr.

e. Particulate Matter (PM)

The emission rate of particulate matter discharged to the atmosphere from each 575 bhp engine shall not exceed 0.78 grams/bhp-hr unless the rate of emissions is less than 0.25 lbs/hr.

f. Opacity

Visible emissions from each 575 bhp 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 five minutes of firing following the initiation of firing.

B. Operating Requirements

1. All particulate emissions generated from the unloading of cement from a ship or barge with the pneumatic ship unloader shall be captured, contained and routed to the dust collector for treatment prior to discharge to the atmosphere.

2. All engines on the ship unloader shall meet EPA Tier 3 nonroad diesel engine emission standards (40 CFR 89).

3. The maximum firing rate for each 310 bhp diesel engine shall not exceed 15.8 gallons per hour.

4. The maximum firing rate for each 575 bhp diesel engine shall not exceed 30.1 gallons per hour.

5. Each diesel engine shall not operate more than 3500 hours in any consecutive 12-month period.

6. All reasonable precautions shall be taken to prevent visible fugitive emissions from ship unloading operations.

C. Continuous Monitors

1. Prior to unloading a ship or barge, the owner/operator shall inspect the dust collector. The owner/operator shall, at a minimum, check the following during this inspection:

   - Inspect the filter bags for leaks and wear.
   - Check the cleaning sequence of the dust collector.
   - Check the compressed air supply.

   If leaks or abnormal conditions are detected, action to correct the abnormal condition shall be implemented before the dust collector is put back into service.

2. The pressure drop across the dust collector shall be monitored continuously. Pressure drop shall be checked a minimum of once per day during unloading operations and the date, time and measurement shall be recorded.

3. Each diesel 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 diesel fuel sulfur limit 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 St. Lawrence Cement, US Division or whether the sample was drawn from fuel in storage at the fuel supplier's facility or another location;

   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 the engine and after each new shipment of fuel is 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 fuel oil contains 0.05 percent sulfur by weight, or less.

E. Recordkeeping and Reporting

1. The owner/operator shall maintain records of the daily pressure drop measurement of the dust collector during unloading operations.

2. The owner/operator shall maintain a written record of each inspection of the dust collector including the date and time the inspection took place and any action resulting from the inspection.

3. The owner/operator shall maintain records of the fuel used in each diesel engine.

4. The owner/operator shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation for each diesel engine for the previous 12-month period.

5. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 3500 hours for any diesel engine.

6. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual initial start-up of the pneumatic ship unloader no later than fifteen days after such date.

7. 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.

8. The owner/operator shall maintain copies of all fuel supplier certifications or fuel analyses and these copies shall be made accessible for review by the Office of Air Resources or its authorized representative and EPA. These records shall include a certified statement, signed by the owner/operator of the facility, that the records represent all of the fuel combusted at the facility

9. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:

    a. Change the representation of the facility in the permit 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 the 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 change, which may result in an increased emission rate of any air contaminant, shall be subject to the approval of the Director.

10. 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.

11. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

F. 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. There shall be no bypassing of the dust collector during times when the pneumatic ship unloader is in operation.

3. 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.

4. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate this equipment 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.

G. Malfunctions

1. A malfunction of any air pollution control system that would result in the exceedance of any emission limitation applicable to this facility will necessitate the shutdown of the facility. The facility must remain shutdown until the malfunction has been identified and corrected.

2. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

    a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;

    b. The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.

d. All possible steps were taken to minimize emissions during the period of time that the repairs were performed.

e. Emissions during the period of time that the repairs were performed will not:

(1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and

(2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.

f. The reasons that it would be impossible or impractical to cease the source operation during said period.

g. The owner/operator's action in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.