

28 March 2007

Mr. Calvin Wiebe
ShawCor Pipe Protection LLC, A ShawCor Company
3838 N. Sam Houston Pkwy E.
Suite 300
Houston, TX 77032

Dear Mr. Wiebe:

The Department of Environmental Management, Office of Air Resources, has reviewed and approved your application for the installation of a temporary concrete coating plant at your North Kingstown facility.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 1969).

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: North Kingstown Building Official
Steven C. Eitelman – TRC Environmental Corp.

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

MINOR SOURCE PERMIT

SHAWCOR PIPE PROTECTION, LLC

APPROVAL NO. 1969

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

ShawCor Pipe Protection, LLC

For the following:

The construction and operation of a temporary concrete coating facility.

Located at: *Davisville Road, North Kingstown*

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 *ShawCor Pipe Protection* 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

SHAWCOR PIPE PROTECTION, LLC

APPROVAL NO. 1969

A. Emission Limitations

1. Particulate Matter

- a. All particulate emissions generated from the transfer of cement to the cement storage silo shall be captured, contained, and routed to a baghouse/fabric filter for treatment prior to discharge to the atmosphere.
- b. Particulate emissions generated from the transfer of cement from the cement storage silo to the hopper for the volumetric mixer shall be controlled by a water mist spray that eliminates visible emissions.
- c. Particulate emissions treated by the baghouse/fabric filter shall be reduced by 99.8% or greater before discharge to the atmosphere.
- d. Visible emissions from the baghouse/filter exhaust shall not exceed 10% opacity (six-minute average).

2. Volatile Organic Compounds

- a. The VOC content of the adhesive coating used shall not exceed 3.0 pounds of VOC per gallon of coating (minus water and exempt compounds), as applied.

B. Operating Requirements

1. Raw material throughput shall be limited to the following:

- a. Sand shall be limited to 5.4 tons/hour, 43.2 tons/day, and 1,216 tons/year.
- b. Iron ore shall be limited to 48.6 tons/hour, 389 tons/day, and 10,940 tons/year.
- c. Cement shall be limited to 10.5 tons/hour, 84 tons/day, and 2,357 tons/year.

2. All reasonable precautions shall be taken to prevent fugitive particulate emissions from the storage, handling or transporting of raw materials. Such measures could include, but not be limited to any or all of the following:
 - a. Paving of access or travel routes on the site.
 - b. Use of tarpaulins or similar dust resistant membranes on vehicles transporting raw materials.
 - c. Controlling vehicle operating speeds to minimize generation of dust.
 - d. Covering or watering down piles of sand, iron ore or other dust producing material as necessary to prevent generation of dust.
 - e. Enclosing or covering conveyors transporting sand, iron ore or other dust producing material to prevent generation of dust.
3. The engine/generator set shall not operate more than 225 hours in a 12-month period.

C. Monitoring

1. Once per week, the owner/operator shall inspect the baghouse/fabric filter. The owner/operator shall, at a minimum, check the following during this inspection:
 - Inspect the filter cartridges for leaks and wear.
 - Check the cleaning sequence of the baghouse.
 - 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 owner/operator shall check the water mist spray daily for performance to ensure compliance with the requirements of this permit.

D. Compliance Demonstration

1. Determination of the VOC content of the adhesive coating shall be determined by EPA Reference Test Method 24 (40 CFR 60, Appendix A) or another test method that is approved by the Office of Air Resources and EPA.
2. Compliance with the VOC content limitation in Condition A.2.a may be determined from manufacturer's formulation data. If the VOC content of any material,

determined by a Method 24 test is greater than that indicated by the formulation data, the Method 24 test shall govern.

E. Recordkeeping and Reporting

1. The owner/operator shall maintain the following records:
 - a. The quantity of sand, iron ore and cement used per hour and per day.
 - b. The name, identification number, mass of VOC per volume (excluding water and exempt compounds), and amount of the adhesive coating used, as applied, on a monthly basis.
 - c. The type and amount of solvent used for cleanup operations.
 - d. A written record of the weekly inspection of the dust collector including the date and time the inspection took place and any action resulting from the inspection.
 - e. A written record of the daily checks of the water mist spray including the date and time the check took place and any action resulting from the inspection.
 - f. The total hours of operation for the emergency engine/generator set, on a monthly basis.
2. The owner/operator shall notify the Office of Air Resources, in writing, of the date of actual initial start-up of the concrete coating plant no later than fifteen days after such date.
3. 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.
4. 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.
5. 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.

6. 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 dated 25 January 2007 prepared by TRC Environmental Corporation.
2. There shall be no bypassing of the baghouse/fabric filter during times when cement is being loaded to the cement silo.

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.
5. The temporary concrete coating facility shall be removed from service and rendered inoperable on or before 31 December 2007. The Office of Air Resources may extend this date for good cause demonstrated.

G. Malfunctions

1. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of any air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:
 - a. Identification of the specific air pollution control system and source on which it is installed;
 - b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
 - c. The nature and quantity of air contaminants likely to be emitted during said period;
 - d. Measures that will be taken to minimize the length of said period;
 - e. The reasons that it would be impossible or impractical to cease the source operation during said period.

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.