23 December 2011

Mr. Kevin Hubanks
Broadrock Gas Services, LLC
120 White Plains Road, Suite 610
Tarrytown, NY 10591

Dear Mr. Hubanks:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your minor source permit application for a landfill gas flare for emergency backup use at the Central Landfill in Johnston.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 2141).

If there are any questions concerning this permit, please contact me at 401-222-2808, extension 7011.

Sincerely,

Douglas L. McVay
Acting Chief
Office of Air Resources

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

MINOR SOURCE PERMIT

BROADROCK GAS SERVICES, LLC

APPROVAL NO. 2141

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

Broadrock Gas Services, LLC

For the following:

A LFG Specialties Model CF1242I10 utility flare to be used as a temporary backup to existing landfill gas combustion equipment. The flare has a combustion capacity of 1300-2500 scfm.

Located at: *65 Shun Pike, Johnston*

This permit shall be effective from the date of its issuance and shall remain in effect until 23 December 2012 unless extended by, revoked by or surrendered to the Department. This permit does not relieve *Broadrock Gas Services, 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.**

Douglas McVay, Acting 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

BROADROCK GAS SERVIVES, LLC

APPROVAL NO. 2141

A. Emission Limitations

1. The flare shall be designed for and operated with no visible emissions as determined by the methods specified in condition D.1, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

B. Operating Requirements

1. The flare shall be operated with a flame present at all times.

2. The flare shall be used only with the net heating value of the gas being combusted being 200 BTU/SCF or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3).

3. The flare shall be designed for and operated with an actual exit velocity less than the velocity, V_{max}, as determined by the methods specified in 40 CFR 60.18(f)(5). The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

4. The flare shall be operated and maintained according to its design specifications whenever the collected landfill gas is being routed to the device.

5. The flare shall be equipped with a flame failure alarm that automatically shuts off the blower which delivers landfill gas to the flare.

6. The flare shall be operated at all times when the collected landfill gas is routed to the system.

7. The flare shall be only used as emergency back-up and shall be fired only when landfill gas cannot be routed to control system that meet the requirements of 40 CFR 60.752(b)(2)(iii)(B) or 40 CFR 60.752(b)(2)(iii)(C).

C. Monitoring Requirements

1. The owner/operator shall monitor the flare to ensure that it is operated and maintained in conformance with its design.

2. The owner/operator shall install, calibrate, maintain and operate according to the manufacture's specifications, the following equipment:

    a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame; and

    b. A gas flow rate measuring device that shall record the flow to the flare at least every 15 minutes; or

    c. Secure the bypass line valve in the closed position with a car-seal or a lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass valve.

D. Testing Requirements

1. Method 22 of appendix A to 40 CFR 60 shall be used to determine the compliance of the flare with the visible emission provisions of condition A.1. The observation period is 2 hours and shall be used according to Method 22.

E. Recordkeeping and Reporting Requirements

1. The permittee shall keep up-to-date, readily accessible records for the life of the flare, the data listed below, as measured during the initial compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of vendor specifications for each air pollution control device shall be maintained until removal:

    a. Flare type (i.e. steam-assisted, air-assisted, or non-assisted)

    b. All visible emission readings;

    c. Heat content determination;

    d. Flow rate measurements;

    e. Exit velocity determinations ; and

f. Continuous records of pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame or the flare flame is absent.

2. The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the flare.

3. The permittee shall keep up-to-date, readily accessible continuous records for the flare of the flame or flare pilot flame monitoring and up-to-date, readily accessible records of all periods of operation which the flame or flare pilot flame is absent.

4. The permittee shall notify the Office of Air Resources within one hour after the occurrence any breakdown or malfunction of the flare resulting in the discharge of raw landfill gas to the atmosphere. The following information shall be reported:

   a. Identification of the device that is malfunctioning.

   b. The suspected reason for the malfunction.

   c. The corrective action taken or to be taken.

   d. The anticipated time needed to make repairs.

5. 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.

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

   a. Change the representation of the device 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.

7. All records required as a condition of this approval 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. Malfunctions

1. In the case of a malfunction of the flare that results in the release of raw landfill gas 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 the flare is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to continue to discharge landfill gas to the flare 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 the flare 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 necessary to bring the air pollution control system back to normal and proper operation 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. Any parts or material needed should be shipped overnight where possible or practical.

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.

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.

G. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the flare shall be designed, constructed, and operated in accordance with the representation of the device 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 flare 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.