



# Temporary Permit

Permit No: **TP-B-0535a**  
Date Issued: **May 24, 2007**  
Minor Permit Amendment: **October 2, 2007**

This certifies that the

**Androscoggin Valley Regional Refuse Disposal District (AVRRDD)**  
**15 Mt. Forist Street**  
**P.O. Box 336**  
**Berlin, NH 03570-0336**

has been granted a Temporary Permit for a  
**Landfill Gas Flare**

at the following facility and location:

**Mt. Carberry Landfill**  
**Success, New Hampshire**  
**Facility ID Number: 3300790120**  
**Application Number: FY07-0154**

which facility includes devices that emit air pollutants into the ambient air as set forth in the permit application filed with the New Hampshire Department of Environmental Services, Air Resources Division (the Department) on **December 14, 2006** and **July 5, 2007**, in accordance with RSA 125-C of the New Hampshire Laws.

Request for permit renewal is due to the Department at least 90 days prior to expiration of this permit and must be accompanied by the appropriate permit application forms. This permit is valid upon issuance and expires **November 30, 2008**.

A handwritten signature in blue ink, appearing to read "Robert J. ...", is written over the word "COPY" in large blue capital letters.

Director, Air Resources Division

### Frequently Used Abbreviations and Acronyms

AAL	Ambient Air Limit
acf	actual cubic foot
ags	above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAS	Chemical Abstracts Service
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DER	Discrete Emission Reduction
DES	New Hampshire Department of Environmental Services
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
hp	horsepower
hr	hour
kW	kilowatt
lb	pound
LPG	Liquefied Petroleum Gas
Mg	Megagram
MM	million
MSDS	Material Safety Data Sheet
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NG	Natural Gas
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standards
PM <sub>10</sub>	Particulate Matter < 10 microns
ppm	parts per million
psi	pounds per square inch
RACT	Reasonably Available Control Technology
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SO <sub>2</sub>	Sulfur dioxide
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

**I. Facility Description**

The Androscoggin Valley Regional Refuse Disposal District (AVRRDD) owns and operates (through its contractor) the Mt. Carberry Landfill, a RCRA Subtitle D non-hazardous municipal solid waste landfill. Originally permitted by the James River Corporation in 1989, the landfill served a succession of pulp and paper mill companies in Berlin before AVRRDD acquired the landfill from Fraser, LLC in 2002. The landfill serves the communities of Berlin, Dummer, Errol, Gorham, Jefferson, Milan, Northumberland, Randolph, Stark and unincorporated places in Coos County, New Hampshire. The Facility also accepts non-hazardous waste from commercial waste haulers in the region.

The Mt. Carberry landfill is designed with a double-liner system and has a waste deposition area (existing Stages 1-8 plus future Stage 9) totaling approximately 67 acres. The majority of the landfill surface area is covered by a temporary geomembrane. Several passive gas flares of low capacity are distributed across the surface. The landfill gas flare described by this Temporary Permit is one component of an active landfill gas collection and control system being developed to control emissions at the Facility. Some of the passive devices will be retained to provide flaring capacity during brief periods when the active gas collection system is being serviced.

**II. Emission Unit Identification**

This permit covers each emission device or source identified in Table 1.

<b>Table 1 – Emission Unit Identification</b>				
Emission Unit ID	Area Source or Device Name	Manufacturer/ Model/ Serial Number	Year Installed	Maximum Permitted Capacity/ Permitted Fuel Type/ Nominal Heat Input <sup>1</sup>
EU01	Landfill <sup>2</sup>	–	1989	2,705,353 cubic meters (Stages 1-9) <sup>3</sup>
EU02	Flare No. 1	Not Available	2007	1,200 scfm / Landfill Gas / 36 MMBtu/hr

**III. Pollution Control Equipment Identification**

A. The system/process listed in Table 2 is identified as pollution control equipment for this Facility.

<b>Table 2 – Pollution Control Equipment Identification</b>			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE1	SulfaTreat sulfur removal system	Pretreatment of landfill gas to reduce sulfur dioxide emissions	EU02

- B. The air pollution control equipment shall be operated in a manner consistent with the terms and conditions of this Permit at all times.
- C. The air pollution control equipment shall be maintained in good working order and shall be operated in conformance to the manufacturers’ design specifications and operating procedures. The manufacturers’ design specifications, operating manuals, and recommended maintenance schedules shall be kept on file for review by the Department upon request.

<sup>1</sup> Maximum permitted capacity is stated in units of scfm. Nominal heat input is calculated on the basis of an assumed higher heating value (HHV) of 500 Btu/scf for landfill gas.

<sup>2</sup> The landfill is included in this permit as an emission source. The landfill and gas collection system are also regulated as a solid waste facility under a separate Solid Waste Management Facility Permit (# DES-SW-88-029) issued by the Department.

<sup>3</sup> The landfill permitted capacity establishes the Facility as a major source of air pollution under Title V of the Clean Air Act.

**IV. Stack Criteria**

A. The following device at the Facility shall have an exhaust stack<sup>4</sup> that discharges vertically, without obstruction, and meets the criteria in Table 3:

<b>Table 3 – Stack Criteria</b>			
<b>Stack Number</b>	<b>Emission Unit or Pollution Control Equipment ID</b>	<b>Minimum Height (feet above ground surface)</b>	<b>Maximum Exit Diameter (feet)</b>
1	EU02	25	0.67

- B. Stack criteria described in Table 3 may be changed without prior approval from the Department provided that:
1. An air quality impact analysis is performed either by the Facility or the Department (if requested by the Facility in writing) in accordance with Env-A 606, *Air Pollution Dispersion Modeling Impact Analysis Requirements*, and the “Guidance and Procedure for Performing Air Quality Impact Modeling in New Hampshire,” and
  2. The analysis demonstrates that emissions from the modified stack will continue to comply with all applicable emission limitations and ambient air limits.
- C. All air modeling data and analyses shall be kept on file at the Facility for review by the Department upon request.

**V. Operating and Emission Limitations**

**A. Flare Operation**

1. The flare (EU02) has been installed for the purpose of controlling landfill gas emissions and odors, and shall be operated in compliance with state and federal air quality standards and emission standards for municipal solid waste landfills. All gas collected in the Facility’s landfill gas collection system shall be routed through the flare except when continued operation of the flare or sulfur removal system requires that the flare be temporarily taken off-line to allow servicing the equipment/process. Periods when the flare is off-line shall be kept to a practical minimum. Bypassing the flare for other cause shall not be allowed.
2. If the flare will be inoperable for a period longer than 24 hours, the Owner or Operator shall notify the Division as provided in item 6 of Table 7.

**B. Sulfur Removal System Operation**

1. The sulfur removal system (PCE01) has been installed for the purpose of reducing sulfur dioxide emissions from the flare. All gas collected in the Facility’s landfill gas collection system shall be routed through the sulfur removal system except when continued operation of the system requires that it be temporarily taken off-line for servicing.
2. If at any time the Owner or Operator wishes to discontinue operation of the sulfur removal system on the grounds that its operation is not essential to maintaining compliance with applicable air quality standards, the Owner or Operator may submit to the Division a written request with supporting documentation seeking approval to suspend operation of the sulfur removal system. The Department shall respond to any such request in writing within 30 days. Any approved suspension of the sulfur removal system operation shall be subject to subsequent review and reconsideration by the Department as circumstances warrant.

<sup>4</sup> Stack, in this case, shall mean the entire vertical riser, flare tip, and windshield assembly.

C. The Owner or Operator shall be subject to the operating and emission limitations identified in Table 4.

Table 4 – Operating and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit(s)	Regulatory Citation
1	<u>Sulfur Dioxide Emissions Limitation</u> Facility-wide emissions of SO <sub>2</sub> shall be limited to less than 250 tons in any consecutive 12-month period <sup>5</sup> .	Facility-wide	Env-A 604.02(a)(1) and Env-A 619
2	<u>Emission Limitations for Regulated Toxic Air Pollutants (RTAPs)</u> The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table Containing the List Naming All Regulated Toxic Air Pollutants</i> .	Facility-wide	Env-A 1400
3	<u>Precautions to Prevent, Abate, and Control Fugitive Dust</u> The Owner or Operator shall take precautions at all times to prevent, abate, and control the emission of fugitive dust, including but not limited to such measures as wetting, covering, or vacuuming.	Facility-wide	Env-A 1002.04
4	<u>Visible Emission Standard</u> The average opacity from fuel burning devices installed after May 13, 1970, shall not exceed 20 percent for any continuous 6-minute period.	EU02	Env-A 2002.02
5	<u>Activities Exempt from Visible Emission Standard</u> The average opacity shall be allowed to be in excess of the standard specified in Env-A 2002.02 for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.	EU02	Env-A 2002.04(c)
6	<u>Particulate Emission Standard for Fuel-Burning Devices Installed on or after January 1, 1985</u> For each fuel-burning device having a maximum gross heat input rate less than 100 MMBtu/hr, particulate emissions shall not exceed 0.30 lb/MMBtu.	EU02	Env-A 2002.08(c)(1)
7	<u>Operating Requirements for Pollution Control Equipment and Processes</u> a) The Owner or Operator shall operate and maintain the landfill gas flare (EU02) and SulfaTreat system (PCE1) in accordance with the recommended procedures and maintenance schedules of the respective equipment manufacturers. b) The Sulfa Treat system shall be considered to be operating normally if the effluent hydrogen sulfide concentration is between 0 and 1,000 ppmv. If the effluent hydrogen sulfide concentration exceeds 1,000 ppmv, the Owner or Operator shall take appropriate actions to regenerate the reactant or undertake other measures as may be necessary to restore the system to normal function. c) The SulfaTreat system shall be operated and maintained so as to prevent media saturation or fouling. Within 30 days of first exhaustion of the SulfaTreat reactant, the Owner or Operator shall establish the range of differential pressures between inlet and outlet that are indicative of normal system performance and submit the findings to the Department.	EU02, PCE1	Env-A 604.01

<sup>5</sup> As long as Facility-wide emissions of SO<sub>2</sub> remain below the indicated limit, the Facility shall be exempt from Prevention of Significant Deterioration (PSD) permit program requirements as a synthetic minor source of this pollutant. This provision does not affect the Facility's status under concurrent program requirements. Specifically, the Facility remains a major source of air pollution under the Title V permit program.

Table 4 – Operating and Emission Limitations			
Item #	Applicable Requirement	Applicable Emission Unit(s)	Regulatory Citation
8	<u>NSPS Requirements for Municipal Solid Waste Landfills</u> <sup>6</sup> The Owner or Operator shall comply with all applicable parts of the Standards of Performance for Municipal Solid Waste Landfills as set forth in 40 CFR Part 60, <i>Standards of Performance for New Stationary Sources</i> (“NSPS”).	Facility-wide	40 CFR 60.750-60.759 (Subpart WWW)
9	<u>Title V Operating Permit Requirements</u> <sup>5</sup> The Owner or Operator shall submit an application for a Title V Operating Permit for the Facility no later than August 24, 2007.	Facility-wide	Env-A 609 and 40 CFR 60.752(b)

## VI. Monitoring/Testing Requirements

The Owner or Operator shall be subject to the monitoring/testing requirements identified in Table 5.

Table 5 - Monitoring/Testing Requirements					
Item #	Parameter(s)	Method of Compliance	Frequency	Applicable Emission Unit(s)	Regulatory Citation
1	Various pollutants	<u>Stack Testing for Stationary Sources</u> When conditions warrant, the Division may require the Owner or Operator to conduct emission compliance testing in accordance with Department-approved methods.	As required	EU02	RSA 125-C:6 XI and Env-A 802
2	Landfill gas constituent concentrations	<u>Testing of Landfill Gas Composition</u> a) The Owner or Operator shall perform tests of landfill gas composition at the designated frequency. For each required sampling event, three samples shall be taken at the main gas collection system header just upstream from the sulfur removal system by approved sample collection methods. b) Analyses shall be performed for the following landfill gas constituents in accordance with the referenced methods: 1) methane, carbon dioxide, nitrogen, oxygen [40 CFR 60, Appendix A, Method 3C]; 2) total reduced sulfur [ASTM 5504]; 3) total VOC [EPA Method TO-15 (GC/MS)]; 4) total NMOC [40 CFR 60, Appendix A, Method 25C].	Once within 180 days of construction and initial operation of the LFG collection system; thereafter, quarterly for b)1) and b)2), annually for b)3) and b)4).	EU01	Env-A 604.01

<sup>6</sup> The facility became subject to NSPS and Title V requirements when the Department issued approval for the Stage 9 landfill expansion on May 24, 2006.

<b>Table 5 - Monitoring/Testing Requirements</b>					
<b>Item #</b>	<b>Parameter(s)</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Emission Unit(s)</b>	<b>Regulatory Citation</b>
3	Landfill gas flow rate	<p><u>Monitoring of Landfill Gas Flow Rate</u></p> <p>A flow measuring device shall be installed in the main header pipe at an appropriate distance upstream from the gas flare. The instantaneous flow rate shall be measured and recorded at intervals not exceeding 15 minutes, and shall be corrected for temperature and pressure. The instrumentation shall include a totalizer to allow monitoring of daily, monthly, and annual quantities of gas delivered to the flare.</p>	Continuous	EU02	Env-A 604.01
4	Flame presence	<p><u>Monitoring of Flare Operation</u></p> <p>The landfill gas flare shall be equipped with instrumentation to monitor flame presence. The flame detection equipment shall operate continuously and shall signal an alarm whenever a flameout occurs.</p>	Continuous	EU02	Env-A 604.01
5	Hydrogen sulfide in landfill gas	<p><u>Monitoring of Sulfur Removal System Performance</u></p> <p>a) The Owner or Operator shall determine hydrogen sulfide concentrations at inlet and outlet ports of the SulfaTreat system to assess system performance on a regular basis. Sampling and analysis shall be accomplished by means of Drager tubes or other approved method.</p> <p>b) Whenever hydrogen sulfide measurements are taken, the Owner or Operator shall also check inlet and outlet pressures (or differential pressure) as an indicator of media usage and fouling.</p>	Five days per week until initial exhaustion of the SulfaTreat reactant; thereafter, in accordance with the schedule set forth in the monitoring plan identified in item 8, below	PCE01	Env-A 604.01
6	Annual methane generation rate	<p><u>Calculation of Annual Methane Generation Rate</u></p> <p>a) The Owner or Operator shall calculate the predicted annual methane generation rate and predicted annual gas collection rate in each of the next 25 years, at a minimum. Predicted annual methane generation rates shall be developed using the latest version of USEPA's LandGEM<sup>7</sup> model with appropriate input values of k and L<sub>0</sub>. Landfill gas collection rates shall be based on overall gas collection efficiency estimates of 75, 80, 85, and 90 percent.</p> <p>b) The predicted gas collection rates shall be compared with existing and planned landfill gas control capacities to assess future capacity needs.</p>	Annually	Facility-wide	Env-A 604.01

<sup>7</sup> USEPA, Landfill Gas Emissions Model (LandGEM) version 3.02, May 2005, or later versions.

Landfill Gas Flare -- Mt. Carberry Landfill

**Table 5 - Monitoring/Testing Requirements**

Item #	Parameter(s)	Method of Compliance	Frequency	Applicable Emission Unit(s)	Regulatory Citation
7	NMOC Emissions	<p><u>NSPS Calculation of NMOC Emission Rate</u></p> <p>The Owner or Operator shall either design, install, and operate a landfill gas collection and control system complying with 40 CFR 60.752(b)(2) or calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii).</p> <p>a) If the calculated NMOC emission rate is less than 50 Mg per year, the Owner or Operator shall:</p> <ol style="list-style-type: none"> <li>1) Submit an annual emission report to the Department, except as provided for in 40 CFR 60.757(b)(1)(ii); and</li> <li>2) Recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 Mg per year, or the landfill is closed.</li> </ol> <p>b) If the NMOC emission rate, upon recalculation, is equal to or greater than 50 Mg per year, the Owner or Operator shall design, install, and operate a collection and control system in compliance with 40 CFR 60.752(b)(2).</p>	Initially and annually	EU01	40 CFR60.752(b)
8	Various	<p><u>Landfill Gas Collection and Control System Monitoring Plan</u></p> <p>a) The Owner or Operator shall develop a detailed plan describing standard operating procedures for monitoring the landfill gas collection and control system. The monitoring activities to be included in the plan will be established by the Department in consultation with the Owner or Operator.</p> <p>b) In addition, the plan shall describe all recordkeeping and reporting to be performed in conjunction with the proposed monitoring activities.</p> <p>c) The monitoring plan shall be submitted to the Department for review and approval. Upon receipt of approval, the Owner or Operator shall implement the monitoring plan immediately.</p>	Submission of draft plan within 180 days from initial startup of the gas collection and control system	Facility-wide	Env-A 604.01

## VII. Recordkeeping Requirements

The Owner or Operator shall be subject to the recordkeeping requirements identified in Table 6.

<b>Table 6 - Recordkeeping Requirements</b>				
Item #	Applicable Requirement	Frequency	Applicable Emission Unit(s)	Regulatory Citation
1	<p><u>Record Retention and Availability</u></p> <p>The Owner or Operator shall keep the records required by this permit on file. These records shall be available for review by the Department upon request.</p>	Continuous for a minimum of 5 years	Facility-wide	Env-A 902.01(a)
2	<p><u>General Recordkeeping Requirements for Combustion Devices</u></p> <p>The Owner or Operator shall maintain the following records of fuel characteristics and utilization for the fuels used in the combustion devices:</p> <p>a) Type (e.g., landfill gas) and amount of fuel burned in each device.</p> <p>b) Sulfur content of gaseous fuel burned in terms of grains sulfur per 100 scf of fuel, or percent sulfur by weight, at standard temperature and pressure; and</p> <p>c) BTU content per cubic foot of landfill gas.</p>	Monthly	EU02	Env-A 903.03
3	<p><u>Additional Recordkeeping Requirements for Sulfur Dioxide</u></p> <p>The Owner or Operator shall maintain a 12-month running total record of SO<sub>2</sub> emissions from all devices, including non-permitted devices, for the purpose of demonstrating that Facility-wide emissions of this pollutant are below the annual emission limitation identified in item 1 of Table 4.</p>	Monthly	EU02	Env-A 619 and Env-A 906.01
4	<p><u>Recordkeeping for Regulated Toxic Air Pollutants (RTAPs)</u></p> <p>The Owner or Operator shall determine compliance with the AALs by using one of the methods provided in Env-A 1405. Documentation for the demonstration of compliance shall be retained at the Facility and shall be made available to the Department for inspection.</p>	Continuous	Facility-wide	Env-A 1405.01
5	<p><u>Additional Recordkeeping Requirements for Testing of Landfill Gas Composition</u></p> <p>The Owner or Operator shall keep a record of the date and test results for all samples collected and analyzed pursuant to the testing of landfill gas composition as described in item 2 of Table 5.</p>	Initially and quarterly	EU01	Env-A 906.01
6	<p><u>Additional Recordkeeping for Gas Flow Rate</u></p> <p>The Owner or Operator shall keep a record of all flow data recorded pursuant to item 3 of Table 5.</p>	Continuous	EU02	Env-A 903.03 and Env-A 906.01
7	<p><u>Additional Recordkeeping for Flare Operation</u></p> <p>Pursuant to item 4 of Table 5, the Owner or Operator shall keep a record of all periods during which the flare is not operating, including scheduled or unscheduled periods for service and unscheduled down time caused by flameout or other malfunction. The record shall include the reason for each outage, initial date and time of each outage, and the date and time that flare operation is restored.</p>	Continuous	EU02	Env-A 906.01

**Table 6 - Recordkeeping Requirements**

Item #	Applicable Requirement	Frequency	Applicable Emission Unit(s)	Regulatory Citation
8	<p><u>Additional Recordkeeping Requirements for Sulfur Removal System</u></p> <p>The Owner or Operator shall record all measurements of hydrogen sulfide concentrations and differential pressures, and any maintenance or restorative actions taken, pursuant to the operation and monitoring of the sulfur removal system as described in item 7 of Table 4 and item 5 of Table 5.</p>	Daily during the first 90 days from initial startup; thereafter, in accordance with the schedule set forth in the monitoring plan identified in item 8 of Table 5	EU02	Env-A 906.01
9	<p><u>Additional Recordkeeping for Calculation of Annual Methane Generation Rate</u></p> <p>The Owner or Operator shall maintain records of the annual methane generation and gas collection rate calculations identified in item 6 of Table 5.</p>	Initially and annually	EU01	Env-A 604.01
10	<p><u>NSPS Recordkeeping Requirements for MSW Landfills</u></p> <p>The Owner or Operator shall maintain records of the NMOC emission rate calculations identified in item 7 of Table 5.</p>	Initially and annually	EU01	40 CFR60.752(b)
11	<p><u>Recordkeeping Requirements for Permit Deviations</u></p> <p>a) Definitions:</p> <ol style="list-style-type: none"> <li>1) A <i>permit deviation</i> is any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in either a Title V permit, state permit to operate, temporary permit or general state permit issued by the Department.</li> <li>2) An <i>excess emission</i> is an air emission rate that exceeds any applicable emission limitation.</li> </ol> <p>b) In the event of a permit deviation (including any excess emissions), the Owner or Operator of the affected device, process, or air pollution control equipment shall record the following information:</p> <ol style="list-style-type: none"> <li>1) The permit deviation;</li> <li>2) The probable cause of the permit deviation;</li> <li>3) The date of the occurrence;</li> <li>4) The duration;</li> <li>5) The specific device that contributed to the permit deviation; and</li> <li>6) Any corrective or preventative measures taken.</li> </ol>	As necessary	Facility-wide	Env-A 911.03

### VIII. Reporting Requirements

The Owner or Operator shall be subject to the reporting requirements identified in Table 7.

Table 7 – Reporting Requirements				
Item #	Applicable Requirement	Frequency	Applicable Emission Unit(s)	Regulatory Citation
1	<p><u>Availability of Records to the Public</u></p> <p>All data submitted to the Department, including emission data and applicable emission limitations, shall be available to the public.</p>	Continuous	Facility-wide	Env-A 902.01(d)
2	<p><u>General Reporting Requirements</u></p> <p>The Owner or Operator shall submit to the Department an annual emissions report which shall include the following information:</p> <p>a) Actual calendar year emissions from each device of CO, NO<sub>x</sub>, SO<sub>2</sub>, TSP, VOCs, HAPs, and RTAPs; (Note: VOCs, HAPs, and RTAPs shall be listed by individual CAS number and chemical name.)</p> <p>b) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>; and</p> <p>c) All information recorded pursuant to item 2 of Table 6.</p>	Annually (no later than April 15 <sup>th</sup> of the following year)	Facility-wide	Env-A 907.01
3	<p><u>Additional Reporting Requirements for Testing of Landfill Gas Composition</u></p> <p>The Owner or Operator shall submit to the Department within 30 days after the information becomes available all analytical test results obtained pursuant to the periodic testing of landfill gas composition as described in item 2 of Table 5.</p>	Initially, quarterly, or annually, as set forth in item 2 of Table 5	EU01	Env-A 910.01
4	<p><u>Additional Reporting Requirements for Sulfur Removal System</u></p> <p>The Owner or Operator shall submit to the Department the information identified in item 7, paragraph c)4 of Table 4.</p>	Once, within 30 days of first exhaustion of the SulfaTreat reactant	EU02	Env-A 910.01
5	<p><u>Additional Reporting Requirements for Calculation of Annual Methane Generation Rate, etc.</u></p> <p>The Owner or Operator shall submit to the Department an annual report containing the calculated annual methane generation rate, gas collection rates, and assessment of future capacity needs identified in item 6 of Table 5.</p>	Annually	EU01	Env-A 604.01

## Landfill Gas Flare -- Mt. Carberry Landfill

Table 7 – Reporting Requirements

Item #	Applicable Requirement	Frequency	Applicable Emission Unit(s)	Regulatory Citation
6	<p><u><i>Additional Reporting Requirements for Inoperable Flare</i></u></p> <p>In the event that the flare will be inoperable for a period exceeding 24 hours, the Owner or Operator shall notify the Department by telephone (603-271-1370), fax (603-271-7053), or e-mail (<a href="mailto:pdeviations@des.state.nh.us">pdeviations@des.state.nh.us</a>) as follows:</p> <ol style="list-style-type: none"> <li>a) Make notification within 24 hours of identification of the device inoperability; or, if it is a Saturday, Sunday, or state or federal legal holiday, make notification on the next regular business day; and</li> <li>b) Submit a written report to the Department within 10 days of the device inoperability, which report shall include the following information: <ol style="list-style-type: none"> <li>1) Facility name;</li> <li>2) Facility address;</li> <li>3) Name of the responsible official employed at the Facility;</li> <li>4) Facility telephone number;</li> <li>5) Dates and time of the device inoperability;</li> <li>6) Description of, and reason for, the device inoperability;</li> <li>7) Corrective or restorative actions taken or proposed;</li> <li>8) Date and time that the device returned to operation in compliance with permit conditions.</li> </ol> </li> </ol>	As necessary	EU02	Env-A 604.01
7	<p><u><i>NSPS Reporting Requirements for MSW Landfills</i></u></p> <ol style="list-style-type: none"> <li>a) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the Owner or Operator shall submit an NMOC emission rate report to the Department initially and annually thereafter. The Department may request such additional information as may be necessary to verify the reported NMOC emission rate. <ol style="list-style-type: none"> <li>1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a).</li> <li>2) If the estimated NMOC emission rate as reported in the annual report to the Department is less than 50 Mg per year in each of the next 5 consecutive years, the Owner or Operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Department. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Department. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.</li> <li>3) The NMOC emission rate report shall include all the data, calculations, sample reports, and measurements used to estimate the annual or 5-year emissions.</li> </ol> </li> </ol>	Initially, within 90 days after the date of commenced construction, modification, or reconstruction; annually thereafter.	EU01	40 CFR60.752(b)

Table 7 – Reporting Requirements				
Item #	Applicable Requirement	Frequency	Applicable Emission Unit(s)	Regulatory Citation
	<p><u>NSPS Reporting Requirements for MSW Landfills (continued)</u></p> <p>4) The Owner or Operator is exempted from the NMOC reporting requirements described above, after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.</p> <p>b) Within 1 year of the first report in which the NMOC emission rate equals or exceeds 50 Mg per year, any Owner or Operator subject to the provisions of 40 CFR 60.752(b)(2)(i) shall submit a collection and control system design plan to the Department, except as follows:</p> <p>1) If the Owner or Operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 Mg per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 Mg per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 Mg per year.</p> <p>2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emission rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40 CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Department within 1 year of the first calculated emission rate exceeding 50 Mg per year.</p>			
8	<p><u>Additional Reporting Requirements for Landfill Gas Collection and Control System Monitoring</u></p> <p>a) The Owner or Operator shall submit the monitoring plan identified in item 8 of Table 5 within the indicated timeframe.</p> <p>b) Periodic monitoring activity reports required for compliance with the approved monitoring plan shall be submitted in accordance with a schedule to be established by the Department in consultation with the Owner or Operator.</p> <p>c) The quarterly reporting of landfill gas composition required under item 3 of Table 7; annual reporting of methane generation rate, etc. required under item 5 of Table 7; and annual reporting of NMOC emission rate required under item 7 of Table 7, may be combined with reports submitted pursuant to paragraph b) above.</p>	Submission of draft plan within 180 days from initial startup; subsequent schedule for submission of monitoring activity reports to be determined	Facility-wide	Env-A 910.01



## IX. Permit Amendments

### A. Env-A 612.01, *Administrative Permit Amendments:*

1. An administrative permit amendment includes the following:
  - a. Corrects typographical errors;
  - b. Requires more frequent monitoring or reporting; or
  - c. Allows for a change in ownership or operational control of a source provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.
2. The Owner or Operator may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

### B. Env-A 612.03, *Minor Permit Amendments: Temporary Permits and State Permits to Operate:*

1. The Owner or Operator shall submit to the Department a request for a minor permit amendment for any proposed change to any of the conditions contained in this permit which will not result in an increase in the amount of a specific air pollutant currently emitted by the devices listed in Table 1 and will not result in the emission of any air pollutant not emitted by the source of device.
2. The request for a minor permit amendment shall be in the form of a letter to the Department and shall include the following:
  - a. A description of the proposed change; and
  - b. A description of any new applicable requirements that will apply if the change occurs.
3. The Owner or Operator may implement the proposed change immediately upon filling a request for the minor permit amendment.

### C. Env-A 612.04, *Significant Permit Amendments: Temporary Permits and State Permits to Operate:*

1. The Owner or Operator shall submit a written request for a permit amendment to the Department at least 90 days prior to the implementation of any proposed change to the physical structure or operation of the devices covered by this permit which increases the amount of a specific air pollutant currently emitted by such device or which results in the emission of any regulated air pollutant currently not emitted by such device.
2. A request for a significant permit amendment shall include the following:
  - a. A complete application form, as described in Env-A 1703 through Env-A 1708, as applicable;
  - b. A description of:
    - i. The proposed change;
    - ii. The emissions resulting from the change; and
    - iii. Any new applicable requirements that will apply if the change occurs; and
  - c. Where air pollution dispersion modeling is required for a device pursuant to Env-A 606.02, the information required pursuant to Env-A 606.03.
3. The Owner or Operator shall not implement the proposed change until the Department issues the amended permit.

## X. Emission-Based Fee Requirements

- A. Env-A 705.01, *Emission-based Fees*: The Owner or Operator shall pay to the Department each year an emission-based fee for emissions from the devices listed in Table 1.
- B. Env-A 705.02, *Determination of Actual Emissions for use in Calculating of Emission-based Fees*: The Owner or Operator shall determine the total actual annual emissions from the devices listed in Table 1 for each calendar year in accordance with the methods specified in Env-A 616, *Determination of Actual Emissions*. If the emissions are determined to be less than one ton, the emission-based fee shall be calculated using an emission-based multiplier of one ton.
- C. Env-A 705.03, *Calculation of Emission-based Fees*: The Owner or Operator shall calculate the annual emission-based fee for each calendar year in accordance with the procedures specified in Env-A 705.03 and the following equation:

$$\text{FEE} = \text{E} * \text{DPT}$$

where:

- FEE = The annual emission-based fee for each calendar year as specified in Env-A 705;  
E = Total actual emissions as determined pursuant to Condition X.B; and  
DPT = The dollar per ton fee the Department has specified in Env-A 705.03(e).

Env-A 705.04, *Payment of Emission-based Fee*: The Owner or Operator shall submit, to the Division, payment of the emission-based fee by April 15th for emissions during the previous calendar year. For example, the fees for calendar year 2007 shall be submitted on or before April 15, 2008.