COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Regional Office, 627 Main Street, Worcester, MA 01608

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

FINAL AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Resource Control, Inc.
4 Liberty Lane West
Hampton, NH 03842

INFORMATION RELIED UPON:

Transmittal No. X223644 (Permit Renewal)
Transmittal No. W061954A (gas to energy plant)
Transmittal No. W094485 (gas collection system)
Transmittal No. X224236 (gas to energy plant)
Transmittal No. W033831 (flare approval)

FACILITY LOCATION:

Fitchburg Westminster Landfill
Fitchburg/Princeton Road
Westminster, Massachusetts

FACILITY IDENTIFYING NUMBERS:

AQ ID: 1180329
FMF FAC NO. 133373
FMF RO NO. 359576

NATURE OF BUSINESS:

Waste Disposal Facility

PRIMARY SIC:

SIC Code: 4953 (NAICS 562212)

RESPONSIBLE OFFICIAL:

Resource Control, Inc.
Name: Lee Solheid
Title: Vice President
Phone: (603) 929-3285
Alternate: Terrance Bennett, Director of Operations
Phone: (508) 836-5645

FACILITY CONTACT PERSON:

Resource Control, Inc.
Name: Robert Magnusson
Title: Market Area Engineer
Phone: (603) 929-5435
Email: bmagnusson@wm.com

This operating permit shall expire on June 18, 2014.

For the Department of Environmental Protection, Bureau of Waste Prevention

Thomas Cusson, Permit Chief, Bureau of Waste Prevention — Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the Operating Permit.

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this permit.

DESCRIPTION OF FACILITY AND OPERATIONS

The Fitchburg/Westminster Landfill has been in operation since the early 1970's. The entire landfill is currently operated by a private company, Resource Control, Inc. (RCI). The entire landfill has a footprint of approximately 104 acres and is composed of three sections. Sections 1 and 2 occupy a footprint of 47 acres, are estimated to contain 3.0 million Megagrams of waste in place and are owned by the City of Fitchburg. Section 3, an expansion, occupies a footprint of 57 acres, is permitted to accept 5.0 million Megagrams of waste and is owned by RCI.

Due to its size, the landfill is subject to the New Source Performance Standard for Landfills (40 CFR 60 Subpart WWW). The latest NMOC calculations, in accordance with the NSPS and based on Tier 2 testing conducted on December 29, 2006, indicated that the 2008 NMOC emissions are less than 50 Mg/yr. Upon meeting or exceeding the NMOC emission rate of 50 Mg/yr, the landfill will also become subject to the National Emission Standards for HAPs for municipal solid waste landfills (40 CFR 63 Subpart AAAA).

Sections 1 and 2 have a gas collection system, approved in April 1996 by the MassDEP's Division of Solid Waste, which directs landfill gas (LFG) to nearby Pinetree Power for combustion. On August 29, 1996, Air Quality Plan Approval Transmittal 109547 was issued to a private company, Neo Fitchburg Ltd. Partnership, for the operation of a back-up flare in the event that the combustor at Pinetree Power is off-line. This back-up flare is located on the property of the landfill.

A separate gas collection system was constructed to remove gas from section 3 and excess gas from section 2 (specifically, phase 4). On July 15, 2003, Air Quality Plan Approval Tr. W033831 was issued to RCI for the construction of this new gas collection system with a 66.8 million BTU/hr open flare. In July 2004, the landfill began placing waste in the new expansion, Phase 3.

In October 2004, the facility was inspected by the Environmental Protection Agency (EPA). As the result of the EPA inspection, Notice of Violation (NOV) Docket #AAA-06-0012 was issued on April 11, 2006. The NOV identified, in part, that the Phase 3 expansion required a state permit for VOC emissions and for collection and control equipment. Subsequently, the facility received Plan Approval Tr. W094485 on September 6, 2007 for the installation and operation of a gas collection and control

system for Phase 3. Additionally, the landfill obtained Plan Approval Tr. W061954 on August 2, 2005 for the installation of a gas to energy plant consisting of reciprocating internal combustion engines (RICE). Plan Approval Tr. W061954 was amended and replaced by Tr. W061954A on January 13, 2006 to modify the model and number of RICE utilized to generate electricity. At full build-out, the plant would consist of a sulfur treatment system, five RICE and the use of the 66.8 million BTU/hr open flare (approved by Tr. W033831 in 2003) as a backup control system. On July 31, 2008, MassDEP amended Tr. W061945A to allow the use of a candle stick flare as another backup control device for the gas to energy plant only in the event that the flow rate is too low for the 66.8 million BTU/hr flare. On January 8, 2009, the landfill obtained Plan Approval Tr. X224236 for the modification of the gas to energy plant consisting of an increase in engine capacity.

As of December 31, 2008, the facility has purchased three landfill gas fired reciprocating internal combustion engines to generate electricity.

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this operating permit:

Table 1

Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
EU1	Entire Landfill (Sections 1, 2 and 3)	Total: 8.0 million Megagrams	See below under EU2 and EU3A-D.
EU2	Landfill Sections 1 and 2	3.0 million Megagrams	Landfill gas collection, treatment and sale with one backup utility flare
EU3A	Landfill Section 3 – Collection system	5.0 million Megagrams waste. n/a	Landfill gas collection, sulfur treatment and combustion in RICE with backup flare **(1)**
EU3B	Landfill Section 3 – SulfaTreat unit	5.0 million Megagrams waste. 2660 scfm	
EU3C	Landfill Section 3 – Five Caterpillar Model 3520 Reciprocating Internal Combustion Engines	5.0 million Megagrams waste. 586 scfm **(2)**, 1600 kW, 17.8 million BTU/hr EACH (2930 scfm, 8 MW, 89 million BTU/hr total)	
EU3D	Landfill Section 3 – Parnel Biogas Flare (Backup Open Flare)	5.0 million Megagrams waste. 10 inch, 100-2000 scfm **(2)**, 66.8 x 10^6BTU/hr	

(1) Some gas from section 2 phase 4 is also collected and routed to this control device.
(2) At 50% methane

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2

Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

4. APPLICABLE REQUIREMENTS

A. EMISSION LIMITS AND RESTRICTIONS

The permittee is subject to the emission limits/restrictions as contained in Table 3 below:

Table 3

EU #	FUEL/RAW MATERIAL	Pollutant	EMISSION LIMIT/STANDARD **(1)**	RESTRICTIONS **(1)**	APPLICABLE REGULATION AND/OR APPROVAL NO.
EU1	LFG	NMOC **(3)**	<50 Mg/yr uncontrolled	No restriction until facility has emissions ≥ 50 Mg/yr	40 CFR 60, Subpart WWW (Landfill NSPS)
EU2 **(2)**	LFG	All pollutants including LFG	N/a (limits are contained in a permit issued to another party)	Collect and transport LFG for resale to third party	310 CMR 7.02
EU3A (collection System)	LFG	All pollutants including LFG		Install LFG collection (see Special Conditions)	Tr. W094485
				Active LFG collection (see Special Conditions)	
				Collection efficiency (see Special Conditions)	
			<25% LEL methane at perimeter monitoring wells	Minimize off-site migration of subsurface gas	Tr. W094485
		Methane	< 500 ppmv above background (SEM)		Tr. W094485
EU3B (sulfur pretreat)	LFG	SO_2		Treatment and removal of H_2S to 200 ppmv or less prior to combustion **(4)**	Tr. W061954(A)
EU3C Engines 1-3 **(2)**	LFG	PM	≤ 0.061 lb/MMBtu **(5)** ≤ 0.40 tpm per engine ≤ 4.8 tpy per engine		Tr. X224236

Table 3

EU #	FUEL/RAW MATERIAL	Pollutant	EMISSION LIMIT/STANDARD **(1)**	RESTRICTIONS **(1)**	APPLICABLE REGULATION AND/OR APPROVAL NO.
EU3C (cont) Engines 1-3 **(2)**		SO_2	≤ 0.066 lb/MMBtu **(4) (5)** ≤ 0.44 tpm per engine ≤ 5.3 tpy per engine		Tr. X224236
		NOx	≤ 0.166 lb/MMBtu **(5)** ≤ 0.60 grams per brake hp-hr per engine ≤ 1.10 tpm per engine ≤ 13.2 tpy per engine		Tr. X224236
		CO	≤ 0.830 lb/MMBtu **(5)** ≤ 5.50 tpm per engine ≤ 66.0 tpy per engine		Tr. X224236
		VOC	≤ 0.083 lb/MMBtu **(5)** ≤ 0.55 tpm per engine ≤ 6.6 tpy per engine		Tr. X224236
		NMOC **(3)**	≤ 0.083 lb/MMBtu **(5)** ≤ 0.55 tpm per engine ≤ 6.6 tpy per engine		Tr. X224236
		Opacity	0% except during startup, a period not to exceed five minutes		Tr. W061954(A)
			During startup, opacity shall not exceed 20% opacity for a period or aggregate period of time in excess of two minutes during any five minute startup provided that at no time during the said two minutes shall the opacity exceed 40%		310 CMR 7.06 and Tr. W061954(A)
		Smoke	During startup, ≤ No. 1 of the Chart **(8)** except No. 1 to < No. 2 of the Chart for ≤ 6 minutes in any one hour		310 CMR 7.06 and Tr. W061954(A)
EU3C Engines 4 and 5 **(2)**	LFG	all		BACT (see Special Conditions)	Tr. W061954(A)
EU3C **(2)**	LFG	PM	≤ 18.1 tpy	Primary fuel is LFG. LFG usage shall not exceed 13,243 MMBtu/month per engine, 66,216 MMBtu per month and 590,900 MMBtu per year **(5)**.	Tr. W061954(A) and X224236
		SO_2	≤ 19.5 tpy		
		NOx	≤ 49.4 tpy		
		CO	≤ 247.0 tpy		
		VOC	≤ 24.7 tpy		
		NMOC **(3)**	≤ 24.7 tpy		
			98% destruction or less than 20 ppmv, dry basis and corrected to 3% oxygen		
EU3C and EU3D	LFG	H_2S	After April 14, 2007, ≤ 200 ppmv or less prior to combustion **(4)**		Tr. W061954(A)
EU3D Open Flare **(2)**	LFG	SO_2	≤ 0.066 lb/MMBtu **(4)(9)** ≤ 18.9 tpy		Tr. W061954(A)
		PM	≤ 0.05 lb/MMBtu **(9)** ≤ 13.2 tpy	Primary fuel is LFG.	

Table 3

EU #	FUEL/RAW MATERIAL	Pollutant	EMISSION LIMIT/STANDARD **(1)**	RESTRICTIONS **(1)**	APPLICABLE REGULATION AND/OR APPROVAL NO.
EU3D (cont) Open Flare **(2)**		NOx	≤ 0.054 lb/MMBtu**(9)** ≤ 15.8 tpy	Propane or natural gas shall be used for the pilot. LFG usage shall not exceed 120,000 cf per hour, 46,693 MMBtu per month and 585,098 MMBtu per year **(9)**.	Tr. W033831
		CO	≤ 0.27 lb/MMBtu**(9)** ≤ 79 tpy		
		VOC	≤ 0.03 lb/MMBtu**(9)** ≤ 9.3 tpy		
		NMOC **(3)**	98% destruction or less than 20 ppmv, dry basis and corrected to 3% oxygen		Tr. W033831
		Opacity	0% except for periods not to exceed five minutes during startup, during any two consecutive hours		Tr. W033831
			During startup, opacity <20% opacity for two minutes, but never exceed 40% **(7)**		310 CMR 7.06 and Tr. W033831
		Smoke	≤ No. 1 of the Chart**(8)** except No. 1 to < No. 2 of the Chart for ≤ 6 minutes in any one hour		310 CMR 7.06 (1) (a)
Facility-wide	Controlled LFG and fugitive LFG	HAP	< 10 tpy any single HAP and less than 25 tpy total HAPs		Tr. W033831

NOTE 1: Emissions in "tons per year" are based on a twelve-month rolling period. Volumes in “cubic feet per year” are based on a twelve-month rolling period. Compliance with emission limit(s)/standard(s) shall be based on a one-hour averaging time, unless otherwise specified.
NOTE 2: Individual combustor information and restrictions are in Section 5 Special Conditions of this Operating Permit.
NOTE 3: NMOC is Non-methane Organic Compounds, measured as Hexane.
NOTE 4: 200 ppmv based on a one month average, but never to exceed 500 ppmv.
NOTE 5: Based on a higher heating value of 506 BTU per scf of LFG.
NOTE 6: Any engine installed after January 1, 2009 shall meet the then current emission limits recognized by MassDEP to be BACT. In no case shall the emission limits be greater than those noted in Plan Approval Tr. X224236.
NOTE 7: Opacity shall not exceed 20% for two minutes during any one hour period, and at no time during the said two minutes exceed 40%.
NOTE 8: Chart means the Ringlemann scale for grading density of smoke, as published by the U.S. Bureau of Mines and referred to as Information Circular No. 8333, or any smoke inspection guide approved by the MassDEP.
NOTE 9: Based on a higher heating value of 557 BTU per scf of LFG.

B. COMPLIANCE DEMONSTRATION

The permittee is subject to the monitoring/testing, recordkeeping, and reporting requirements as contained in Tables 4, 5, and 6 below, 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

Table 4

EU#	MONITORING/TESTING REQUIREMENTS

Table 4

EU#	MONITORING/TESTING REQUIREMENTS
EU1	1) In accordance with 40 CFR 60 Subpart WWW, annually calculate/monitor the non-methane organic compound (NMOC) emission rate, in megagrams.
	2) In accordance with 310 CMR 7.13(1), any person owning, leasing, operating, or controlling a facility for which the MassDEP has determined that stack testing is necessary to ascertain compliance with the MassDEP's regulations shall cause such stack testing: (a) to be conducted by a person knowledgeable in stack testing, (b) to be conducted in accordance with procedures contained in a test protocol which has been approved by MassDEP, (c) to be in the presence of a representative of the MassDEP when such is deemed necessary, and (d) to be summarized and submitted to MassDEP with analyses and report within such time as agreed to in the approved test protocol.
	3) In accordance with 310 CMR 7.02 and Plan Approval Transmittal No. W033831, calculate and monitor facility emission rates for individual HAPs and total HAPs to indicate that emissions are less than 10 tons per year of any single HAP and less than 25 tons per year total HAPs. HAP emissions shall be calculated using the equations for calculating emissions in Section 2.4 of the US EPA Compilation of Air Pollution Emission Factors, Volume I: Stationary Point Sources, AP-42, Fifth edition, November 1998. The default values for landfill gas constituents provided in Table 2.4-1 and the typical control efficiencies of landfill gas flares provided in Table 2.4-3 shall be used in calculating controlled emissions. The latest edition of AP-42 shall be used, when available, for HAP calculations.
	4) In accordance with 310 CMR 7.00: Appendix C(9)(b), monitor the annual waste acceptance rate.
	5) In accordance with Plan Approval Transmittal Nos. W033831 and W061954A, 310 CMR 7.12(1)(a)1. and 310 CMR 7.12(2)(a)1., monitor the operations of the entire facility such that necessary information is available for the preparation of the **annual** Source Registration/Emission Statement form as required by 310 CMR 7.12.
EU3A	6) Pursuant to Plan Approval Transmittal No. W094485, each wellhead shall have at least one sample port in accordance with 40 CFR 60.756(a).
	7) Pursuant to Plan Approval Transmittal No. W094485, collection system components shall be operated in accordance with 40 CFR 60.753.
	8) Pursuant to Plan Approval Transmittal No. W094485, upon commencement of operation of the collection system, the Permittee shall commence the routine monitoring, record keeping and reporting requirements as outlined in 40 CFR 60.756(a), (c) and (f) and 40 CFR 60.758(c)(4), (d) and (e). 40 CFR 60.756(a), includes monitoring nitrogen or oxygen, temperature and pressure at each wellhead at least once per month. 40 CFR 60.756(c) includes monitoring the flare for the presence of a flame and flow rate. 40 CFR 60.756(f) includes monitoring surface methane concentrations. Installation or lack of, a final cover or final cap on a cell shall not prevent the Permittee's compliance with these requirements. The first sampling event shall occur within 90 calendar days of each extraction point installation.
	9) Pursuant to Plan Approval Transmittal No. W094485, the Permittee shall monitor methane and carbon dioxide concentration at each wellhead on a monthly basis.
	10) Pursuant to Plan Approval Transmittal No. W094485, monitor the oxygen level and temperature of each deactivated well every 14 days.
	11) In accordance with 310 CMR 7.00: Appendix C(9)(b), to minimize off-site migration of subsurface gas, the Permittee shall monitor gas concentration at the perimeter or property boundary.
	12) Pursuant to Plan Approval Transmittal No. W094485, the Permittee shall monitor for methane concentration on a quarterly basis, at a minimum, and use the sampling points indicated in 40 CFR 60.753(d). This requirement applies to uncapped and capped areas of Section 3 of the Landfill that have active gas collection, but excludes the active face. The Permittee shall operate the collection system so that the surface concentration of methane is less than 500 ppmv above background at the surface of the landfill. Any reading of 500 ppmv or more at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i) through (v) shall be taken.

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
EU3A (cont.)	13) In accordance with Plan Approval Transmittal No. W094485, when conducting the quarterly surface monitoring, in addition to following all other procedures required by the NSPS (Subpart WWW), the Permittee shall: 1. Monitor the following: a. Areas where the monitoring technician can visually observe distressed vegetation; b. Areas where there are visible cracks in the landfill cover; c. The border between capped and uncapped areas of the Landfill; d. Areas where seeping or puddles or pools of water are visible on the surface of the Landfill (to determine if moisture has accelerated the production of LFG and to determine if an entire area of the Landfill is saturated, including the collection wells and trenches); and e. At the base and at any other openings to the atmosphere of gas collection wells and other structural components protruding from the Landfill surface (to determine if Landfill settling has created openings between the structures and the waste through which LFG could escape and to ensure the continuing effectiveness of the LFG collection well seals); 2. Monitor shall be performed during typical meteorological conditions and on days that are free of measurable precipitation in Fitchburg and Westminster, Massachusetts and on which there are no measured wind speeds above 12 miles per hour at the Fitchburg/Westminster Landfill meteorological station; and 3. Maintain records of all surface monitoring events, methane concentrations that exceed 500 ppm, and corrective action taken.
	14) Pursuant to Plan Approval Transmittal No. W094485, the Permittee shall monitor the LFG collected from Section 3 on a monthly basis.
EU3B	15) In accordance with Plan Approval Transmittal No. W061954A, monitor the hydrogen sulfide concentration (ppmv) at the inlet and outlet of the treatment system every two weeks and maintain the records on-site. The Department will consider changing the frequency of the testing/monitoring for H_2S based upon a petition supporting a change in frequency; a written Department approval will be required to change the frequency of testing/monitoring for H_2S concentrations.
EU3C	16) In accordance with Plan Approval Transmittal No. W061954A, monitor each engine/generator set continuously for run time and kW produced.
	17) In accordance with Plan Approval Transmittal No. W061954A, shall continuously monitor landfill gas flow using an LFG flow recorder. Said recorder shall be maintained so that an on-site record of the total volume of LFG fired by the five engines will be available by date and time period.
	18) In accordance with Plan Approval Tr. No. W061954A, one operable oxygen analyzer shall be maintained on-site and a record shall be maintained of the stack outlet oxygen level at least once/week on each engine.
	19) The ability of the facility to maintain emission rates at or below the levels in Plan Approval Tr. W061954A and X224236 shall be demonstrated to the MassDEP in the future if deemed necessary.
	20) Emission testing shall be performed to determine compliance with CO, NMOC and NOx emission limits contained in Plan Approvals Tr. W061954A and Tr. X224236. All emissions testing shall be completed within 90 days from the date that each engine commences LFG burning.
EU3D	21) In accordance with Plan Approval Transmittal No. W033831, the Permittee shall visually inspect the flare in accordance with 40 CFR 60 Appendix A Method 22 within one week of startup. Thereafter, brief visual inspections shall be performed on a weekly basis.
	22) In accordance with Plan Approval Transmittal No. W094485 and 40 CFR 60.756(c), the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
	1. 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. 2. A device that records flow to or bypass of the flare. The owner or operator shall either: (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or (ii) 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 line.
	23) In accordance with Plan Approval Transmittal No. W033831, the Permittee shall compute monthly emissions (in lb/month) by multiplying the LFG flow rate for the month (in scf) by the most recent measured higher heating value of the LFG (in BTU/scf) and then multiplying by the appropriate emission rate indicated in Table II of said Plan Approval (in lb/MMBtu)**(1)**. Note that the emission rates in Table II of said Plan Approval are equivalent to those in Table 3, EU#3D in this Operating Permit. To determine the 12-month rolling emissions (in tpy), the Permittee shall add the calculated monthly pollutant emissions (in lb/month) to the previous 11-months' pollutant emissions (in lb/month) and then convert to tons by dividing by 2000.
EU3C and EU3D	24) In accordance with Plan Approval Transmittal Nos. W033831 and W061954A, the Permittee shall sample/test the heating value, in BTU/scf, of the landfill gas on a quarterly basis.
EU3A, 3B, 3C and 3D	25) In accordance with Plan Approval Transmittal Nos. W033831 and W061954A, all emission testing shall be conducted in accordance with US EPA reference test methods as specified in the Code of Federal Regulations Title 40 Part 60 Appendix A (Method 7 for oxides of nitrogen (NO_x), Method 6 for sulfur dioxide (SO_2), Method 10 for carbon monoxide (CO), Methods 1 to 5 for TSP, Method 3A for Oxygen (O_2), Method 9 for opacity (including detached plumes)), or methods as approved by the MassDEP. Prior to Stack Testing, appropriate testing ports shall be constructed so as to accommodate the requirements as stipulated in 40 CFR Part 60, Appendix A.
	26) In accordance with Plan Approval Transmittal Nos. W033831 and W061954A, monitoring equipment or emissions monitoring systems installed for the purpose of documenting compliance shall be installed, maintained, calibrated and operated by the Permittee in sufficient manner to ensure continuous and accurate operations at all times.

(1) The short-term SO2 limit in Tr. W033831 was modified in Plan Approval Tr. X224236.

B. COMPLIANCE DEMONSTRATION (cont.)

Table 5	
EU#	RECORDKEEPING REQUIREMENTS
EU1	1) In accordance with 310 CMR 7.00 Appendix C(10)(b), maintain records on-site and in sufficient detail to demonstrate compliance with the applicable averaging time, including records of all monitoring data and supporting information, for a period of at least five (5) years from the date of the monitoring sample, measurement, report or initial operating permit application. Supporting information includes at a minimum, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by the operating permit, and any other information required to interpret the monitoring data. Records required to be maintained shall include, where applicable: 1. The date, place as defined in the permit, and time of sampling or measurements; 2. The date(s) analyses were performed;

Table 5	
EU#	RECORDKEEPING REQUIREMENTS
EU1 (cont.)	3. The company or entity that performed the analyses; 4. The analytical techniques or methods used; 5. The results of such analyses; and 6. The operating conditions as existing at the time of sampling or measurement Records shall be readily available to the MassDEP and EPA personnel
	2) In accordance with 310 CMR 7.00 Appendix C(10)(b), all records shall be kept on-site for a period of at least five (5) years and shall be readily available to MassDEP personnel upon request.
	3) Maintain records of the annual NMOC emission rate, in Megagrams, and the annual waste acceptance rate in accordance with 40 CFR 60 Subpart WWW.
	4) Maintain sufficient records of its operations and monitoring information for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12. Copies of the submitted forms shall be kept on-site for five years.
	5) Maintain records of any emissions compliance testing done in accordance with 310 CMR 7.13 and 40 CFR 60, Appendix A, if such testing is requested by the MassDEP.
	6) In accordance with 40 CFR 60 Subpart WWW, the permittee shall comply with all applicable record keeping requirements of §§60.750 through 60.759, inclusive, to include but not limited to: 1. Keep, for at least 5 years, up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
EU3A	7) In accordance with Plan Approval Transmittal W094485, the Permittee shall record nitrogen or oxygen, temperature and pressure at each wellhead at least once per month. The first sampling event shall occur within 90 calendar days of each extraction point installation.
	8) In accordance with Plan Approval Tr. W094485, the Permittee shall record the date that waste is first placed in each cell of Section 3 and the estimated capacity of the cell and expected period of operation.
	9) In accordance with Plan Approval Transmittal W094485, the Permittee shall record the date that each cell of Section 3 reached final grade or has stopped accepting waste for more than 180 days.
	10) Pursuant to Plan Approval Transmittal No. W094485, the Permittee shall monitor and record methane and carbon dioxide concentration at each wellhead on a monthly basis.
	11) Pursuant to Plan Approval Transmittal No. W094485, upon commencement of operation of the collection system, the Permittee shall commence the routine monitoring, record keeping and reporting requirements as outlined in 40 CFR 60.758(c)(4), (d) and (e). 40 CFR 60.758(c)(4) relates to flare records (see EU3D, below). 40 CFR 60.758(d) requires the Permittee to keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector and also: • Each owner or operator shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b). • Each owner or operator shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in Sec. 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in Sec. 60.759(a)(3)(ii). 40 CFR 60.758(e) requires the Permittee to keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

Table 5	
EU#	RECORDKEEPING REQUIREMENTS
	Installation or lack of, a final cover or final cap on a cell shall not prevent the Permittee's compliance with these requirements.
EU3B	12) In accordance with Plan Approval Transmittal W061954A, the Permittee shall record the hydrogen sulfide concentration at the inlet and outlet of the sulfur removal system every two weeks until written Department approval alters the frequency.
EU3C	13) In accordance with Plan Approval Transmittal W061954A, the Permittee shall record the heat input of LFG in BTU combusted in engines 1-5 for each month and for each twelve-month rolling period. Records shall be retained on-site and may be generated by gas chromatograph and/or field measurements.
	14) In accordance with Plan Approval Transmittal W061954A, all operating and monitoring records, including emission test reports, shall be maintained for the life of the facility; the five (5) most recent years shall be maintained on-site.
EU3C and 3D	15) In accordance with Plan Approval Transmittal Nos. W033831, W061954A and X223644, records of emissions testing conducted to demonstrate compliance with the applicable requirements shall be in accordance with 310 CMR 7.13(1)(d).
	16) On a monthly basis, emissions in pounds per month and total tons per twelve month rolling period shall be determined and recorded for methane, VOC and NMOCs and shall meet the following: 1. Emissions in pounds per month shall be determined by summing emissions from the control device and emissions from uncollected gas. 2. Emissions from uncollected gas shall be determined by multiplying the flow rate of uncollected LFG in standard cubic feet ("scf") by the appropriate pollutant concentration. The Permittee shall identify the concentration used and the method followed to determine that concentration. Uncollected LFG gas volume shall be computed by back calculating from the measured LFG flow rate for the month in scf and the determined collection efficiency. The appropriate pollutant concentration shall be determined from the most recent measured concentration of pollutant in the LFG; Hydrogen sulfide data shall be prior to the sulfur treatment system and methane data shall be from the flare inlet. Well data or engine inlet data can be utilized. NMOC concentration shall be based on most recent sampling/test data. Emission rates shall be assumed to be 40-60 % by volume for methane and 85% of NMOC as VOC unless testing indicates otherwise. 3. NMOC concentration may change based upon new data subject to approval by MassDEP. Currently, NMOC concentration shall be assumed to be equal to the most recent sampling results, currently 550 ppmv as hexane for the LFG routed to the engines/flare. Any future sampling and NMOC testing, including Tier 2 sampling to comply with the NSPS, shall be submitted to MassDEP for review and approval. 4. Collection efficiency shall be assumed to be 75% if the most recent methane surface monitoring at Section 3 did not exceed 500 ppmv and perimeter monitoring shows lateral gas migration is less than 25% LEL. Collection efficiency shall be 85% if the landfill is capped with a Subtitle D cap, shows no signs of cracks or distressed vegetation, if the most recent methane surface monitoring of the landfill did not exceed 500 ppmv, and perimeter monitoring shows lateral gas migration is less than 25% LEL. If the landfill does not meet these conditions, Central Region, MassDEP, Bureau of Waste Prevention, Permit Section Chief shall be notified. The Permittee may propose an alternative demonstration of the collection efficiency for Section 3. Any alternative collection efficiency must be approved by MassDEP prior to its use in future calculations or record keeping. 5. To determine the 12-month rolling emissions in tons per year, the calculated monthly pollutant emissions (in lb/month) shall be added to the sum of the previous 11-months pollutant emissions (in lb/month) and then converted to short tons by dividing by 2000.

Table 5

EU#	RECORDKEEPING REQUIREMENTS
EU3D	17) In accordance with Plan Approval Transmittal W033831, the Permittee shall maintain a copy of the Standard Operating Procedure (SOP) and Standard Maintenance Procedure (SMP) for the flare in a readily available location for as long as this approval is valid. Updates or revisions to the SOP and SMP shall be submitted for MassDEP approval prior to initiating the modification(s).
	18) Pursuant to Plan Approval Transmittal W094485 and 40 CFR 60.758(c)(4), keep for 5 years up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. The data recorder documenting the presence of the flame must clearly indicate date and time.
EU3A, 3B, 3C and 3D	19) In accordance with Plan Approval Transmittal W033831, Transmittal W094485 and Transmittal W061954A, the Permittee shall prepare and maintain sufficient records to demonstrate compliance with all Operation, Production and Emission Limits set forth in the applicable Plan Approval. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP examination. Such records shall include, but are not limited to: 1. The initiation and completion dates for the proposed construction/alteration; 2. A record of all malfunctions of the gas system or its components, flares and engines including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the facility returned to compliance; 3. A record of all maintenance performed; 4. Record of the opening and closing dates for each cell; 5. Record of monthly active wellhead monitoring for O_2 or N_2, temp, methane, carbon dioxide; 6. Record of monthly passive wellhead monitoring for methane; 7. Record of initial opacity inspection of the 66.8 mmbtu/hr flare; 8. Record of weekly visual inspection; 9. Record of quarterly surface emissions monitoring for methane; 10. Record of hydrogen sulfide concentration at the inlet and outlet of the sulfur removal system; 11. Record of weekly engine stack outlet oxygen levels; 12. Record of LFG flow to the engines; 13. Record of run time and kW produced per engine; 14. Record of heating value of landfill gas (Btu/scf), as monitored quarterly; 15. Record of actual volume of LFG collected; 16. Record of volume of LFG burned, in scf, in each engine and the flare, on a monthly and twelve-month rolling basis; The record shall take into account the total volume of LFG fired by the engines and the flare and the individual engine set run time and amount of electricity produced. 17. Monthly and twelve-month rolling total emissions of NO_x, CO, NMOC, VOC, PM and SO_2 emitted.
	20) Pursuant to the authority granted to the MassDEP at 310 CMR 7.02(7), the facility shall maintain a copy of all approvals, and any subsequent modifications of each approval, on-site for as long as the approvals are valid. An approval is valid until one of the following conditions occur: the equipment is dismantled or removed from the facility, the facility notifies the MassDEP that the approval is no longer valid, the equipment is substantially reconstructed or altered and subject to 310 CMR 7.02, the approval is superceded by another approval, or the MassDEP revokes the approval in accordance with 310 CMR 7.02(3)(k).

B. COMPLIANCE DEMONSTRATION (cont.)

Table 6

EU#	REPORTING REQUIREMENTS
EU1	1) In accordance with 40 CFR 60 Subpart WWW, the permittee shall comply with all applicable reporting requirements of §§60.750 through 60.759, inclusive, to include but not limited to: 1. An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f). 2. Submit an NMOC emission rate report to the Administrator annually, except as provided for in 60.757(b)(1)(ii) and 60.757(b)(3). This report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754(a) or (b), as applicable. 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. 4. When subject to the provisions of §60.752(b)(2)(i), submit a collection and control system design plan to the Administrator within 1 year of the first NMOC emission rate report in which the emission rate equals or exceeds 50 megagrams per year, except as provided in §60.757(c) for facilities which perform Tier 1, Tier 2 and/or Tier 3 testing. 5. Submit a closure report to the Administrator within 30 days of waste acceptance cessation. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).
	2) Submit Emission Statements (Source Registration) annually in accordance with 310 CMR 7.12. In accordance with 310 CMR 7.12, detailed emissions for all criteria and hazardous air pollutants emitted at the facility shall be reported on the annual source registration.
	3) In accordance with 310 CMR 7.13(1) and 7.13(2), if determined by the MassDEP that stack testing is necessary to ascertain compliance with the MassDEP's regulations or design approval provisos shall cause such stack testing to be summarized and submitted to the MassDEP as prescribed in the agreed to pretest protocol.
	4) Upon the MassDEP's request, any records required by the applicable requirements identified in Section 4 of the operating permit or the emissions of any air contaminant from the facility shall be submitted to the MassDEP within 30 days of the request by the MassDEP or within a longer time period if approved in writing by the MassDEP, and shall be transmitted on paper, on computer disk, or electronically at the discretion of the MassDEP, pursuant to 310 CMR 7.00 Appendix C(10)(a) incorporated herein by reference.
	5) In accordance with 310 CMR 7.00 Appendix C(10)(c), the permittee shall report a summary of all monitoring data and related supporting information to the MassDEP at least every six months per calendar year. The report shall be postmarked by the 30th day following the end of the period. (Reports for 1/1 – 6/30 is due by July 30). The summary report shall be submitted on the appropriate MassDEP form and shall include, at a minimum, the measured BTU content of the LFG, the amount of gas combusted and the highest observed opacity for the landfill flare.
	6) In accordance with 310 CMR 7.00 Appendix C (10)(f), the Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention deviations from Operating Permit requirements, by telephone or fax, within 3 days of discovery of such deviation. Said deviation shall also be submitted in writing on an Operating Permit Deviation Report to the MassDEP within 10 calendar days. (See General Condition 25 of this Operating Permit). These reports need not be submitted to the EPA unless specifically directed to by the permit or other requirement.
EU1 (cont.)	7) In accordance with 310 CMR 7.00 Appendix C (10), **if** there are any occurrences of deviations, they shall be summarized and included with the Monitoring Data Summary Report.
	8) In accordance with 310 CMR 7.00 appendix c(5)(b)9., submit annually, based on a calendar year,

Table 6	
EU#	REPORTING REQUIREMENTS
	a certification that the facility is maintaining the required records to assure the facility is in compliance with the applicable requirements designated in this permit. (see provision 10 in "**General Conditions For Operating Permit**")
	9) All required reports must be certified by a responsible official of the Permittee pursuant to 310 CMR 7.00: Appendix C (10)(h).
EU3A	10) In accordance with Plan Approval Transmittal No. W094485, the Permittee shall notify MassDEP, Bureau of Waste Prevention, Central Regional Office, Permit Section Chief by fax or email, within 14 days of the date that waste is first placed in each cell of Section 3. This notification shall include an estimate of the capacity of the cell and expected period of operation.
	11) In accordance with 310 CMR 19.133(1)(c), the Permittee shall notify MassDEP Central Region, Bureau of Waste Prevention, Permit Section Chief and Solid Waste Chief, by fax or e-mail of the existence of damaged or destroyed environmental control systems or monitoring devices and the extent of the damage. The operator shall submit such written notification within 14 days of discovery and shall provide a schedule for repair or replacement for approval by MassDEP. Repair or replacement of monitoring devices shall be completed prior to the next scheduled sampling round.
	12) In accordance with Plan Approval Transmittal No. W094485, the Permittee shall notify MassDEP, Bureau of Waste Prevention, Central Regional Office, Permit Section Chief by fax or email, within 30 days of the date that each cell of Section 3 has reached final grade or has stopped accepting waste for more than 180 days, whichever is earlier. This notification shall include a summary of the amount of waste in place in the cell.
	13) In accordance with Plan Approval Tr. No. W094485, the landfill gas collection system shall minimize off-site migration of subsurface gas. If landfill gas is detected in perimeter wells at 25% LEL or more, then the Permittee shall notify the MassDEP, Air Quality Group within 2 business days.
	14) In accordance with Plan Approval Transmittal No. W094485, the Permittee shall submit a semi annual status report to MassDEP Central Region, Bureau of Waste Prevention, Permit Section Chief. The status report shall include the cell currently accepting waste, a summary report of the status and operation of the sulfur treatment system, a list of recently installed wells, the "as built" plans of each new well, and total LFG flow rate in standard cubic feet collected on a monthly and twelve-month rolling basis. Reports shall be due on or before January 30 and July 30 of each calendar year.
EU3C	15) In accordance with Plan Approval Transmittal No. W061954A, the Permittee shall notify MassDEP in writing thirty days prior to the installation of EACH engine, identifying the date of installation, the manufacturer name, make, model, size and power rating in million of BTU per hour of the engine and the engine emission rates for PM, CO, NOx, VOC and SO2 in pounds per million BTU, pounds per hour and tons per year.
EU3B, EU3C and EU3D	16) In accordance with Plan Approval Transmittal No. W033831 and W061954A, the Permittee shall report to the MassDEP, Bureau of Waste Prevention, Central Regional Office, Permit Section Chief as soon as reasonably practicable by telephone or fax after the occurrence of any upsets or malfunctions (i.e. any piece of equipment or device breakdown that causes an excess emission and/or a condition of air pollution) and in writing within two business days of such event.

C. GENERAL APPLICABLE REQUIREMENTS

The permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et seq. and 310 CMR 8.00 et seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The permittee is currently not subject to the following requirements:

Table 7

REGULATION	DESCRIPTION
40 CFR 64	Compliance Assurance Monitoring Rule
310 CMR 7.07	Open Burning
310 CMR 7.15	Asbestos
310 CMR 7.16	Reduction of Single Occupant Commuter Vehicle Use
310 CMR 7.25	Consumer and Commercial Products
42 U.S.C. 7401, §112(r)(7)	Accidental Release Prevention Requirements: Risk Management under Clean Air Act 112(r)(7)
42 U.S.C. 7401, §601	Stratospheric Ozone

5. SPECIAL TERMS AND CONDITIONS

The permittee is subject to the following special provisions that are not contained in Tables 3, 4, 5 and 6:

Table 8	
SPECIAL TERMS AND CONDITIONS	
EU3A	1) In accordance with the requirements of Plan Approval Tr. No. W094485, the permanent collection piping system installed within the waste limits shall be installed with a minimum 3% slope and the permanent collection piping installed outside the waste limits shall be installed with a minimum 1% slope.
	2) In accordance with Plan Approval Tr. No. W094485, active LFG collection shall occur from each area, cell, or group of cells in Section 3 in which 1. The solid waste has been in place for a period of 24 months or more; or 2. LFG quality is sustainable at methane ≥ 40% (at a collector installed 12-18 months from waste placement); or If more than one condition applies, then the condition that requires the earliest installation of wells and collection of gas shall apply. Landfill gas collection wells that have previously been activated per this paragraph, but are later deactivated due to subsequent monitoring showing elevated oxygen levels (> 5%) or elevated temperature (> 130 degrees F), shall be monitored every 14 calendar days (starting with the deactivation date) for oxygen and temperature. Once the oxygen is less than 5% and the temperature is less than or equal to 130 degrees F the collection well shall be reactivated.
	3) In accordance with Plan Approval Tr. No. W094485, collection efficiency shall be assumed to be 75% if the most recent methane surface monitoring at Section 3 did not exceed 500 ppmv and perimeter monitoring shows lateral gas migration is less than 25% LEL. Collection efficiency shall be 85% if the landfill is capped with a Subtitle D cap, shows no signs of cracks or distressed vegetation, if the most recent methane surface monitoring of the landfill did not exceed 500 ppmv, and perimeter monitoring shows lateral gas migration is less than 25% LEL. If the landfill does not meet these conditions, Central Region, MassDEP, Bureau of Waste Prevention, Permit Section Chief shall be notified. The Permittee may propose an alternative demonstration of the collection efficiency for Section 3. Any alternative collection efficiency must be approved by MassDEP prior to its use in future calculations or record keeping.

	4) In accordance with Plan Approval Tr. No. W094485, LFG collected from Section 3 shall be directed to an approved emission control device at all times.
EU3B	5) In accordance with the requirements of Plan Approval Tr. No. W061954A, EU3A is equipped with a hydrogen sulfide removal system as an air pollution control device. The construction and design of the device shall be consistent with the specifications below: Manufacturer: SulfaTreat Model No.: ST-410HP-10'-22'-88,000 lb or equivalent Design Capacity: at least 2660 scfm and capable of reducing hydrogen sulfide to 200 ppmv or less (at 50% methane) Max. Pressure Drop: 0.7 to 1.7 psig Type: non-regenerative, iron oxide coated ceramic, 4-16 mesh Stack: vents to engine or flare
	6) In accordance with Plan Approval Tr. No. W061954A, EU3A is equipped with a hydrogen sulfide (H2S) removal system as an air pollution control device. The H2S system may be removed and/or retired in place provided LFG gas samples for twelve consecutive months are 200 ppmv or less.
3C	7) In accordance with the requirements of Plan Approval Tr. No. W061954A, any engine installed after January 1, 2009 shall meet the then current emission limits recognized by the Department to be BACT as may be identified in regulation, written policy or most current plan approval for that size and type engine at the time of installation. In no case shall the emission limits be greater than those noted within Plan Approval Tr. W061954(A).
	8) In accordance with the requirements of Plan Approval Tr. No. W061954A and Tr. X224236, EU3A is equipped with a combustor (up to five engines) as a pollution control device. The construction and design of each combustor shall be consistent with the specifications below: Manufacturer / Model: Caterpillar Model 3520 or equivalent Design Capacity: 598 scfm EACH, at 50% methane Max. Heat Input: 17.8 MMBtu/hr EACH (1600kW) Fuel: Landfill Gas (LFG) No. cylinders: 20 EACH Stack Height: min. 19 ft above ground and 10 ft above the roof of the engine building Stack Inside Exit Diameter: 16 inches Velocity: 178 fps at 960°F
	9) In accordance with the requirements of Plan Approval Tr. No. W061954A: 1. Each engine shall be equipped with an exhaust silencer that ensures noise from the generators will not cause or contribute to a condition of air pollution. 2. The engine building shall consist of an appropriate foundation, four walls and a roof. The walls and roof shall be made of solid material such as wood, metal, brick or concrete. 3. All doors on the access and exit passageways shall be kept closed at all times that they are not in use. 4. The walls, roof, doors and windows and any ventilation openings for the building shall be acoustically treated as necessary to ensure compliance with 310 CMR 7.10 and MassDEP noise policy 90-001.
	10) In accordance with Plan Approval Transmittal No. W061954A, during routine operations, including startups and shutdowns, the operation of the engines shall not exceed the MassDEP's Noise Policy 90-001. (State Only Applicable)
EU3D	11) In accordance with the requirements of Plan Approval Tr. No. W033831, EU3A is equipped with a combustor (an open flare) as a backup pollution control device. The construction and design of the combustor shall be consistent with the specifications below: Manufacturer: Parnel Biogas Design Capacity: 2000 scfm landfill gas, at 50% methane Max. Heat Input: 66.8 MMBtu/hr Turn Down Ratio: 20 to 1 Material of Construction: carbon and stainless steel Stack Height: 37 feet above ground

	Stack Inside Exit Diameter 10 inches
	12) In accordance with Plan Approval Transmittal No. W033831, operation of the flare shall not exceed the MassDEP's Noise Policy 90-001 and in no case shall cause a condition of air pollution as defined in 310 CMR 7.00 *et seq*.
	13) In accordance with Plan Approval Transmittal No. W033831 and 40 CFR 60.18(e), the flare shall be operated at all times when LFG is vented to it.
	14) In accordance with Plan Approval Transmittal No. W033831 and 40 CFR 60.18(c)(2), the flare shall be operated with a flame present at all times.
	15) In accordance with Plan Approval Transmittal No. W033831, a new plan approval may be required by the MassDEP should the monitored LFG flow rate vary substantially from the proposed 100-2000 scfm.
EU1 – 3D	16) In accordance with 40 CFR 60 Subpart WWW (Landfill NSPS), within 12-months of the landfill meeting or exceeding the 50 Mg per year NMOC threshold, the Permittee shall submit to the Administrator a collection and control system design plan prepared by a professional engineer. Within 30 months the Permittee shall install a collection and control system that captures the gas generated within the landfill in accordance with 40 CFR 60 Subpart WWW.
	17) In accordance with 40 CFR 63, Subpart AAAA (Landfill MACT), when the landfill meets or exceeds the 50 Mg per year NMOC threshold, the facility shall be subject to and be in compliance with all applicable requirements.
	18) Should any nuisance condition(s) occur as a result of the operation of any air contamination source at the facility, then appropriate steps shall immediately be taken to abate said nuisance condition(s). (310 CMR 7.01(1) State Only Applicable)
	19) Shall not cause or allow emissions of sound of sufficient intensity and/or duration as to cause or contribute to a condition of air pollution. (310 CMR 7.10 State Only Applicable)

6. ALTERNATIVE OPERATING SCENARIOS

The permittee has not requested any alternative operating scenarios be incorporated into this operating permit.

7. EMISSIONS TRADING

(a) Intra-facility emission trading

The facility did not request intra-facility emissions trading in its operating permit application.

(b) Inter-facility emission trading

The Permittee did not request inter-facility emissions trading in its operating permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit Reporting Kit" is available to the Permittee via the MassDEP's web site, http://www.mass.gov/dep/air/approvals/aqforms.htm#op.

(a) Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

i. the terms and conditions of the permit that are the basis of the certification;
ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
iv. any additional information required by the MassDEP to determine the compliance status of the source.

(b) Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by

January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

i. the terms and conditions of the permit that are the basis of the certification;
ii. the current compliance status during the reporting period;
iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
iv. whether there were any deviations during the reporting period;
v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
vi. whether deviations in the reporting period were previously reported;
vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
ix. any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This permit does not relieve the permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this permit.

12. PERMIT SHIELD

(a) This facility has a permit shield provided that it operates in compliance with the terms and conditions of this permit. Compliance with the terms and conditions of this permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the permittee's application and as identified in this permit.

Where there is a conflict between the terms and conditions of this permit and any earlier approval or permit, the terms and conditions of this permit control.

(b) The MassDEP has determined that the permittee is not currently subject to the requirements listed in Section 4, Table 7.

(c) Nothing in this permit shall alter or affect the following:

(i) the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
(ii) the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
(iii) the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A.

All other terms and conditions contained in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

14. PERMIT TERM

This permit shall expire on the date specified on the cover page of this permit, which shall not be later than the date 5 years after issuance of this permit.

Permit expiration terminates the permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP’s receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the operating permit renewal application prior to this permit's expiration date, this permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's operating permit for cause. The MassDEP will reopen and amend this permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any operating permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall furnish to the MassDEP copies of records that the permittee is required to retain by this permit.

18. DUTY TO SUPPLEMENT

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This permit is not transferable by the permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between current and new permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

(a) enter upon the permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

(b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The permittee shall be shielded from enforcement action brought for noncompliance with technology based[1] emission limitations specified in this permit as a result of an emergency[2]. In order to use emergency as an affirmative defense to an action brought for noncompliance, the permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;

[1] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[2] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

(b) the permitted facility was at the time being properly operated;

(c) during the period of the emergency, the permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and

(d) the permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6 of this Operating Permit shall supersede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the Massachusetts MassDEP of Environmental Protection Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site,
http://www.mass.gov/dep/air/approvals/aqforms.htm#op .
This report shall include the deviation, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone or fax within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the permit and in compliance with all applicable requirements provided the permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

(a) Administrative Amendments - The permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

(b) Minor Modifications - The permittee may make changes at the facility which are considered minor modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2.,provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

(c) Significant Modifications - The permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

(d) No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this operating permit. A revision to the permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an operating permit revision under any other applicable requirement.

APPEAL CONDITIONS FOR OPERATING PERMIT

This permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a permit.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request, and the relief sought. Additionally, the request must state why the permit is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to The Commonwealth of Massachusetts in the amount of one hundred dollars ($100.00) must be mailed to:

The Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency) county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

28. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT

*Not all abbreviations are present in every Operating Permit

< - Less Than
> - Greater Than
#/hr - Pounds Per Hour
10^6 BTU/hr - 1,000,000 BTU Per Hour
AQCR - Air Quality Control Region
AQ ID – Air Quality Identification
BACT – Best Available Control Technology
CEM - Continuous Emission Monitor
CFR – Code of Federal Regulations
CO - Carbon Monoxide
EPA - Environmental Protection Agency
kW – kilowatt = one thousand watts
FMF FAC. NO. - Facility Master File Number
FMF RO NO. - Facility Master File Regulated Object Number
FT - feet
FT^3/day - Cubic Feet Per Day
H_2S – hydrogen sulfide
HAPs – Hazardous Air Pollutants
HHV - Higher Heating Value
ISO - Represents 5̃9F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level
LFG – Landfill gas
MassDEP - Massachusetts Department of Environmental Protection
MAX. - maximum
Mg – Megagrams = one million grams
MIN. – minimum
MMBTU/hr - Million British Thermal Units Per Hour
MW – megawatt = one million watts
NH_3 - Ammonia
NMOC – non-methane organic compounds
NO_x - Nitrogen Oxides
PB - Lead
PLT ID - Plant Identification
PM - Particulate Matter
PPM - Parts Per Million
PSIG – pounds per square inch gauge
RICE – Reciprocating Internal Combustion Engine
SCFM – standard cubic feet per minute
SEM – Surface Emissions Monitoring
SO_2 - Sulfur Dioxide
TPY - Tons Per Year
Tr. – Transmittal
TEMP - temperature
VOC - Volatile Organic Compound
W – Watt