

# 4138

December 17, 2009

Luly Massaro  
Rhode Island Public Utilities Commission  
89 Jefferson Blvd.  
Warwick, RI 02888  
Attn: Renewable Energy Resources Eligibility

***RE: Facility Application to qualify for new Rhode Island RES***

Dear Ms. Massaro,

I am writing on behalf of our client Innovative Energy Systems to apply for Rhode Island Renewable Energy Standard certificate acquisition. Please find attached a completed application including all necessary documentation as required to establish the Chautauqua Landfill gas facilities as an eligible new facility.

Please submit any questions, concerns or further documentation requests directly to Mrs. Stephanie Lovejoy Hamilton at the contact information listed below. Thank you for your time and attention to this matter.

Conservation Services Group  
Legal Affairs and Compliance  
Clean Energy Markets  
40 Washington Street  
Westborough, MA 01581  
Tel: 508-836-9500 ext 13285  
Cell: 508-439-0417  
Fax: 508-836-3181  
[stephanie.hamilton@csggrp.com](mailto:stephanie.hamilton@csggrp.com)

Sincerely,

Conservation Services Group

RECEIVED  
2009 DEC 28 PM 1:54  
PUBLIC UTILITIES COMMISSION

**RIPUC Use Only**

Date Application Received: \_\_\_ / \_\_\_ / \_\_\_  
Date Review Completed: \_\_\_ / \_\_\_ / \_\_\_  
Date Commission Action: \_\_\_ / \_\_\_ / \_\_\_  
Date Commission Approved: \_\_\_ / \_\_\_ / \_\_\_

GIS Certification #:  
\_\_\_\_\_

## RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM

### The Standard Application Form

Required of all Applicants for Certification of Eligibility of Renewable Energy Resource  
(Version 6 – January 21, 2008)

### STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION

#### Pursuant to the Renewable Energy Act

#### Section 39-26-1 et. seq. of the General Laws of Rhode Island

**NOTICE:**

When completing this Renewable Energy Resources Eligibility Form and any applicable Appendices, please refer to the State of Rhode Island and Providence Plantations Public Utilities Commission Rules and Regulations Governing the Implementation of a Renewable Energy Standard (RES Regulations, Effective Date: January 1, 2006), and the associated RES Certification Filing Methodology Guide. All applicable regulations, procedures and guidelines are available on the Commission's web site: [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html). Also, all filings must be in conformance with the Commission's Rules of Practice and Procedure, in particular, Rule 1.5, or its successor regulation, entitled "Formal Requirements as to Filings."

- Please complete the Renewable Energy Resources Eligibility Form and Appendices using a typewriter or black ink.
- Please submit one original and three copies of the completed Application Form, applicable Appendices and all supporting documentation to the Commission at the following address:

Rhode Island Public Utilities Commission  
89 Jefferson Blvd  
Warwick, RI 02888

Attn: Renewable Energy Resources Eligibility

In addition to the paper copies, electronic/email submittals are required under Commission regulations. Such electronic submittals should be sent to: Luly E. Massaro, Commission Clerk at [lmassaro@puc.state.ri.us](mailto:lmassaro@puc.state.ri.us)

- In addition to filing with the Commission, Applicants are required to send, electronically or electronically and in paper format, a copy of the completed Application including all attachments and supporting documentation, to the Division of Public Utilities and Carriers and to all interested parties. A list of interested parties can be obtained from the Commission's website at [www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html).
- Keep a copy of the completed Application for your records.
- The Commission will notify the Authorized Representative if the Application is incomplete.
- Pursuant to Section 6.0 of the RES Regulations, the Commission shall provide a thirty (30) day period for public comment following posting of any administratively complete Application.
- Please note that all information submitted on or attached to the Application is considered to be a public record unless the Commission agrees to deem some portion of the application confidential after consideration under section 1.2(g) of the Commission's Rules of Practice and Procedure.
- In accordance with Section 6.2 of the RES Regulations, the Commission will provide prospective reviews for Applicants seeking a preliminary determination as to whether a facility would be eligible prior to the formal certification process described in Section 6.1 of the RES Regulations. Please note that space is provided on the Form for applicant to designate the type of review being requested.
- Questions related to this Renewable Energy Resources Eligibility Form should be submitted in writing, preferably via email and directed to: Luly E. Massaro, Commission Clerk at [lmassaro@puc.state.ri.us](mailto:lmassaro@puc.state.ri.us)

---

**SECTION I: Identification Information**

- 1.1 Name of Generation Unit (sufficient for full and unique identification):  
Chautauqua LFGE
- 1.2 Type of Certification being requested (check one):  
 Standard Certification       Prospective Certification (Declaratory Judgment)
- 1.3 This Application includes: (Check all that apply)<sup>1</sup>
- APPENDIX A: Authorized Representative Certification for Individual Owner or Operator
  - APPENDIX B: Authorized Representative Certification for Non-Corporate Entities Other Than Individuals
  - APPENDIX C: Existing Renewable Energy Resources
  - APPENDIX D: Special Provisions for Aggregators of Customer-sited or Off-grid Generation Facilities
  - X APPENDIX E: Special Provisions for a Generation Unit Located in a Control Area Adjacent to NEPOOL
  - X APPENDIX F: Fuel Source Plan for Eligible Biomass Fuels

Primary Contact Person name and title: Stephanie Hamilton, Legal Affairs and Compliance \_\_\_\_\_

- 1.4 Primary Contact Person address and contact information:  
Address: Conservation Services Group  
40 Washington Street, MA 01581

---

Phone: \_\_\_\_\_ 508-836-9500 ext.13285 Fax: \_\_\_\_\_ 508-836-3181 \_\_\_\_\_  
Email: Stephanie.hamilton@csggrp.com \_\_\_\_\_

- 1.5 Backup Contact Person name and title: \_\_\_\_\_ Scott A. Henningham, CFO
- 

- 1.6 Backup Contact Person address and contact information:  
Address: Innovative Energy Systems, LLC  
2999 Judge Road, Oakfield, NY 14125

Phone: 585-948-8580      Fax: 585-948-8584  
Email: shenningham@ieslfge.com

---

<sup>1</sup> Please note that all Applicants are required to complete the Renewable Energy Resources Eligibility Standard Application Form and all of the Appendices that apply to the Generation Unit or Owner or Operator that is the subject of this Form. Please omit Appendices that do not apply.

1.7 Name and Title of Authorized Representative (*i.e.*, the individual responsible for certifying the accuracy of all information contained in this form and associated appendices, and whose signature will appear on the application):

\_\_\_\_\_ Patricia Stanton

Appendix A or B (as appropriate) completed and attached?  Yes  No  N/A

1.8 Authorized Representative address and contact information:

Address: Conservation Services Group  
40 Washington Street, MA 01581

Phone: 508-836-9500 ext 13297 Fax: \_\_\_\_\_ 508-836-3181 \_\_\_\_\_

Email: pat.stanton@csgroup.com

1.9 Owner name and title: \_\_\_\_\_ County of Chautauqua \_\_\_\_\_

\_\_\_\_\_ Pantelis Panteli, Manager Division of Environment

1.10 Owner address and contact information:

Address: \_\_\_\_\_ Gerace Office Building \_\_\_\_\_  
\_\_\_\_\_ Mayville, NY 14757-1007 \_\_\_\_\_

Phone: \_\_\_\_\_ 716-985-4785 \_\_\_\_\_ Fax: \_\_\_\_\_ 716-985-4981 \_\_\_\_\_

Email: \_\_\_\_\_ panetlip@co.chautauqua.ny.us \_\_\_\_\_

1.12 Owner business organization type (check one):

Individual

Partnership

Corporation

Other: Government (County) \_\_\_\_\_

1.13 Operator name and title: \_\_\_\_\_ Innovative Energy Systems, LLC.

Peter H. Zeliff, President and CEO

1.14 Operator address and contact information:

Address: \_\_\_\_\_ 2999 Judge Rd \_\_\_\_\_  
\_\_\_\_\_ Oakfield, NY 14125 \_\_\_\_\_

Phone: \_\_\_\_\_ 585-948-8580 \_\_\_\_\_ Fax: \_\_\_\_\_ 585-948-8584 \_\_\_\_\_

Email: pzeliff@ieslfge.com

1.15 Operator business organization type (check one):

Individual

Partnership

Corporation

Other: \_\_\_\_\_

**SECTION II: Generation Unit Information, Fuels, Energy Resources and Technologies**

2.1 ISO-NE Generation Unit Asset Identification Number or NEPOOL GIS Identification Number (either or both as applicable): \_\_\_\_\_

2.2 Generation Unit Nameplate Capacity: \_\_\_\_\_ 6.4 \_\_\_\_\_ MW

2.3 Maximum Demonstrated Capacity: \_\_\_\_\_ MW

2.4 Please indicate which of the following Eligible Renewable Energy Resources are used by the Generation Unit: (Check ALL that apply) – *per RES Regulations Section 5.0*

- Direct solar radiation
- The wind
- Movement of or the latent heat of the ocean
- The heat of the earth
- Small hydro facilities

X Biomass facilities using Eligible Biomass Fuels and maintaining compliance with all aspects of current air permits; Eligible Biomass Fuels may be co-fired with fossil fuels, provided that only the renewable energy fraction of production from multi-fuel facilities shall be considered eligible.

- Biomass facilities using unlisted biomass fuel
- Biomass facilities, multi-fueled or using fossil fuel co-firing
- Fuel cells using a renewable resource referenced in this section

2.5 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility’s aggregate capacity does not exceed 30 MW. – *per RES Regulations Section 3.31*

- ← check this box to certify that the above statement is true
- N/A or other (please explain) \_\_\_\_\_

2.6 If the box checked in Section 2.4 above is “Small hydro facilities”, please certify that the facility does not involve any new impoundment or diversion of water with an average salinity of twenty (20) parts per thousand or less. – *per RES Regulations Section 3.31*

- ← check this box to certify that the above statement is true
- N/A or other (please explain) \_\_\_\_\_

2.7 If you checked one of the Biomass facilities boxes in Section 2.1 above, please respond to the following:

A. Please specify the fuel or fuels used or to be used in the Unit: \_\_\_\_\_  
\_\_\_\_\_ Methane Gas \_\_\_\_\_

B. Please complete and attach Appendix F, Eligible Biomass Fuel Source Plan.

Appendix F completed and attached? X Yes  No  N/A

2.8 Has the Generation Unit been certified as a Renewable Energy Resource for eligibility in another state's renewable portfolio standard?

Yes  No  If yes, please attach a copy of that state's certifying order.

Copy of State's certifying order attached?  Yes  No  N/A

### SECTION III: Commercial Operation Date

Please provide documentation to support all claims and responses to the following questions:

3.1 Date Generation Unit first entered Commercial Operation: 4/  /   / 2010 at the site.

3.2 Is there an Existing Renewable Energy Resource located at the site of Generation Unit?

Yes

No

3.3 If the date entered in response to question 3.1 is earlier than December 31, 1997 or if you checked "Yes" in response to question 3.2 above, please complete Appendix C.

Appendix C completed and attached?  Yes  No  N/A

3.4 Was all or any part of the Generation Unit used on or before December 31, 1997 to generate electricity at any other site?

Yes

No

3.5 If you checked "Yes" to question 3.4 above, please specify the power production equipment used and the address where such power production equipment produced electricity (attach more detail if the space provided is not sufficient):

---

---

---

### SECTION IV: Metering

4.1 Please indicate how the Generation Unit's electrical energy output is verified (check all that apply):

ISO-NE Market Settlement System

Self-reported to the NEPOOL GIS Administrator

Other (please specify below and see Appendix D: Eligibility for Aggregations):

---

Appendix D completed and attached?  Yes  No  N/A

**SECTION V: Location**

5.1 Please check one of the following that apply to the Generation Unit:

- X Grid Connected Generation
- Off-Grid Generation (not connected to a utility transmission or distribution system)
- Customer Sited Generation (interconnected on the end-use customer side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer)

5.2 Generation Unit address: \_\_\_\_\_  
\_\_\_\_\_ 3889 Towerville Road, Jamestown, NY 14701 \_\_\_\_\_  
\_\_\_\_\_

5.3 Please provide the Generation Unit's geographic location information:

A. Universal Transverse Mercator Coordinates: \_\_\_\_\_

B. Longitude/Latitude: \_\_\_ -79.315149 \_\_\_ / \_\_\_ 42.201476

5.4 The Generation Unit located: (please check the appropriate box)

- In the NEPOOL control area
- X In a control area adjacent to the NEPOOL control area
- In a control area other than NEPOOL which is not adjacent to the NEPOOL control area ← *If you checked this box, then the generator does not qualify for the RI RES – therefore, please do not complete/submit this form.*

5.5 If you checked “In a control area adjacent to the NEPOOL control area” in Section 5.4 above, please complete Appendix E.

Appendix E completed and attached?

X Yes    No    N/A

**SECTION VI: Certification**

6.1 Please attach documentation, using one of the applicable forms below, demonstrating the authority of the Authorized Representative indicated in Section 1.8 to certify and submit this Application.

**Corporations**

If the Owner or Operator is a corporation, the Authorized Representative shall provide **either**:

- (a) Evidence of a board of directors vote granting authority to the Authorized Representative to execute the Renewable Energy Resources Eligibility Form, **or**
- (b) A certification from the Corporate Clerk or Secretary of the Corporation that the Authorized Representative is authorized to execute the Renewable Energy Resources Eligibility Form or is otherwise authorized to legally bind the corporation in like matters.

Evidence of Board Vote provided?  Yes  No  N/A

Corporate Certification provided?  Yes  No  N/A

**Individuals**

If the Owner or Operator is an individual, that individual shall complete and attach APPENDIX A, or a similar form of certification from the Owner or Operator, duly notarized, that certifies that the Authorized Representative has authority to execute the Renewable Energy Resources Eligibility Form.

Appendix A completed and attached?  Yes  No  N/A

**Non-Corporate Entities**

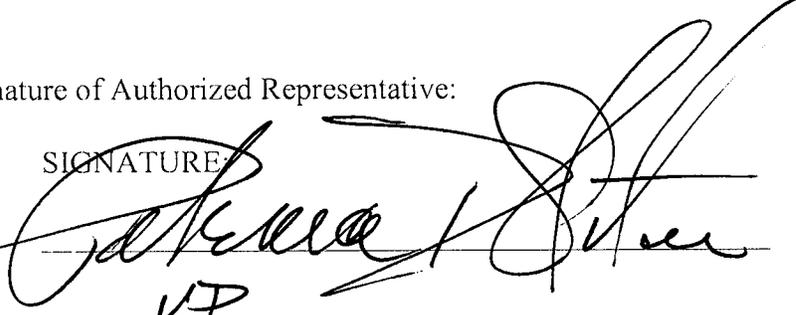
(Proprietorships, Partnerships, Cooperatives, etc.) If the Owner or Operator is not an individual or a corporation, it shall complete and attach APPENDIX B or execute a resolution indicating that the Authorized Representative named in Section 1.8 has authority to execute the Renewable Energy Resources Eligibility Form or to otherwise legally bind the non-corporate entity in like matters.

Appendix B completed and attached?  Yes  No  N/A

6.2 Authorized Representative Certification and Signature:

I hereby certify, under pains and penalties of perjury, that I have personally examined and am familiar with the information submitted herein and based upon 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, both civil and criminal, for submitting false information, including possible fines and punishment. My signature below certifies all information submitted on this Renewable Energy Resources Eligibility Form. The Renewable Energy Resources Eligibility Form includes the Standard Application Form and all required Appendices and attachments. I acknowledge that the Generation Unit is obligated to and will notify the Commission promptly in the event of a change in a generator's eligibility status (including, without limitation, the status of the air permits) and that when and if, in the Commission's opinion, after due consideration, there is a material change in the characteristics of a Generation Unit or its fuel stream that could alter its eligibility, such Generation Unit must be re-certified in accordance with Section 9.0 of the RES Regulations. I further acknowledge that the Generation Unit is obligated to and will file such quarterly or other reports as required by the Regulations and the Commission in its certification order. I understand that the Generation Unit will be immediately de-certified if it fails to file such reports.

Signature of Authorized Representative:

SIGNATURE:  DATE: 12/17/09

VP  
(Title)

**APPENDIX D**  
**(Revised 1/21/08)**  
**(Required of Applicants Seeking Eligibility for Customer-Sited and/or Off-Grid Generation Facilities and Associated Aggregations)**

**STATE OF RHODE ISLAND**  
**PUBLIC UTILITIES COMMISSION**

**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**  
**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

---

Customer-sited and Off-grid Generation Facilities located in Rhode Island may be certified as an eligible resource if their NEPOOL GIS Certificates are created by way of an aggregation of Generation Units using the same generation technology, and so long as the aggregation is certified by the Commission. Please complete the following and attach documentation, as necessary to support all responses:

D.1 Please identify the location(s) in Rhode Island of each Generation Unit that is interconnected on the End-use Customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the End-use Customer, or not connected to a utility transmission or distribution system.

---

---

---

---

---

D.2 Please attach proposed procedures under which the aggregate Generation Units will operate ("Aggregation Agreement"). In accordance with Section 6.8.(iii) of the RES Regulations, the proposed Aggregation Agreement shall contain the following information:

- (a) Name and contact information of the Aggregator Owner, to which these regulations and stipulations of certification shall apply, and who shall be the initial owner of any NEPOOL GIS Certifications so certified;
- (b) Name, contact information, and qualifications of the Verifier. Qualifications shall include any information the applicant believes will assist the Commission in determining that the Verifier will accurately and efficiently carry out its duties. After receipt of the application, the Commission may require additional evidence of qualifications;

- (c) A declaration of any and all business or financial relations between Aggregator Owner and Verifier, which the Commission will use to evaluate the independence of the Verifier.<sup>2</sup>

(c.1) The Aggregation Agreement shall include a statement indicating under what circumstances the Verifier would not be considered sufficiently independent of the individual Generation Unit, and that Generation Units not meeting this independence test would not be allowed to participate in the aggregation;

- (d) Type of technology that will be included in the aggregation, and statement that the aggregation will include only individual Generation Units that meet all the requirements of these regulations, for example physical location, vintage, etc. (All generators within the aggregation must be of the same technology and fuel type);
- (e) Proposed operating procedures for the aggregation, by which the Aggregation Owner shall ensure that individual Generation Units in the aggregation comply with all eligibility requirements and that the NEPOOL GIS Certificates created accurately represent generation;<sup>3</sup>
- (f) Description of how the Verifier will be compensated for its services by the aggregator. In no instances will an aggregation be certified in which the Verifier is compensated in a manner linked to the number of NEPOOL GIS Certificates created by the aggregation; and
- (g) Confirmation and a description of how, no less frequently than quarterly, the Verifier will directly enter into the NEPOOL GIS the quantity of energy production in the applicable time period from each Generation Unit in the aggregation. The entry of generation data by the Verifier must be through an interface designated for this purpose by the NEPOOL GIS and in accordance with NEPOOL GIS Operating Rules applicable to Third-Party Meter Readers, and to which the Aggregation Owner shall not have access<sup>4</sup>.

### D.3 Applicant must acknowledge that:

<sup>2</sup> Reasons for ruling that a Verifier is not sufficiently independent include, but are not limited to: i) If one entity owns, directly or indirectly, or if a natural person so owns, 10% or more of the voting stock or other equity interest in the other entity; ii) If 10% or more of the voting stock or other equity interests in both entities are owned, directly or indirectly, by the same entity or a natural person; or iii) If one entity is a natural person, and such entity or a member of such entity's immediate family is an officer, director, partner, employee or representative of the other entity.

<sup>3</sup> At a minimum, these procedures will: i) require a determination by the Aggregation Owner that the Generation Unit is in compliance with these Renewable Energy Standard regulations and the Aggregation Agreement as approved by the Commission, and an independent determination by the Verifier that the Generation Unit exists; ii) require a meter reading procedure that allows the Verifier to read meters on the Generation Units; meter readings may be manual or remote and via the aggregators own system or via an independent system, but in all cases shall comply with NEPOOL GIS Operating Rules regarding metering; iii) require confirmation that Verifier will be entering the quantity of energy production in to the NEPOOL GIS system as described in paragraph (g) for NEPOOL GIS to create NEPOOL GIS Certificates; and OL GIS Certificates; and ; iv) include a procedure for the Verifier to report to the Commission on the results of their verification process.

<sup>4</sup> Such generation data shall not include any generation data from previous time periods, except as provided for in this section. Output of less than one MWh by any single Generation Unit within the aggregation may be applied to the entire aggregation's generation, and generation of the aggregation less than one full MWh may be applied to the subsequent quarter in accordance with NEPOOL GIS Operating Rules.

(a) any changes to or deviations from the Aggregation Agreement will be considered a change in generator status, and will require recertification by the Commission;

← please check this box to acknowledge this requirement

N/A or other (please explain) \_\_\_\_\_  
\_\_\_\_\_

(b) the Commission will be promptly notified of any changes to or deviations from the Aggregation Agreement; and

← please check this box to acknowledge this requirement

N/A or other (please explain) \_\_\_\_\_  
\_\_\_\_\_

(c) in the event that notice of such changes or deviations is not promptly given, all Generation Units in the aggregation may be de-certified.

← please check this box to acknowledge this requirement

N/A or other (please explain) \_\_\_\_\_  
\_\_\_\_\_

D.4 Applicant must certify that:

If the Generation Unit (or aggregation of generation units) is a Customer-sited or Off-grid Generation Resources, as provided in Rhode Island's Renewable Energy Standard law Section 39-26-2.4 and Section 3.25 of the RES Regulations, respectively, the associated Generation Attributes have not otherwise been, nor will be sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Rhode Island.

← please check this box to certify that this statement is true

N/A or other (please explain) \_\_\_\_\_  
\_\_\_\_\_

**APPENDIX E**  
**(Revised 1/21/08)**

**(Required of all Applicants Located in a Control Area Adjacent to NEPOOL)**

**STATE OF RHODE ISLAND**  
**PUBLIC UTILITIES COMMISSION**

**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**

**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. seq. of the General Laws of Rhode Island**

---

Please complete the following and attach documentation, as necessary to support all responses:

E.1 Please indicate in which Control Area adjacent to NEPOOL the Generation Unit is located:

- New York  
 Hydro Quebec  
 Maritimes (including Northern Maine Independent System Administrator)

E.2 Applicant must provide to the Commission by July 1<sup>st</sup> of each year assurances that the Generation Unit's New Renewable Energy Resources used for compliance with the Rhode Island's Renewable Energy Act during the previous Compliance Year have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Rhode Island. Such assurances may consist of a report from a neighboring Generation Attribute accounting system or an affidavit from the Generation Unit.

- ← please check this box to acknowledge this requirement  
 N/A or other (please explain) \_\_\_\_\_

E.3 Applicant must acknowledge and provide evidence to support that, in accordance with Section 5.1.(ii) of the RES Regulations, the Generation Attributes associated with the Generation Unit shall be applied to the Rhode Island Renewable Energy Standard only to the extent of the energy produced by the Generation Unit that is or will be actually delivered into NEPOOL for consumption by New England customers. Verification of the delivery of such energy from the Generation Unit into NEPOOL will be performed in accordance with subparagraphs (a), (b) and (c) of RES Regulations Section 5.1.(ii)

- ← please check this box to acknowledge this requirement.

(a) Under subparagraph 5.1.(ii)(a), Applicant must verify that the energy produced by the Generation Unit is actually delivered into NEPOOL via “a unit-specific bilateral contract for the sale and delivery of such energy into NEPOOL”.

X ← please check this box to acknowledge the requirement for Applicant to provide ongoing evidence of one or more unit-specific bilateral contract(s) for all energy delivery into NEPOOL for which Applicant seeks RI RES certification, prior to creation of certificates in each quarter, and:

i. Please describe the type of evidence to be provided to the GIS Administrator to demonstrate the existence of such unit-specific bilateral contract(s) for the sale and delivery of such energy into NEPOOL, including duration, quantity and counter-party in NEPOOL:

For evidence, a Power Purchase Agreement between Innovative Energy Systems, LLC., the operator of Chautauqua, and Seneca Energy II LLC, the counter-party in NEPOOL, for twenty years and for the entire output of Chautauqua, will be submitted to the GIS as proof of a unit-specific bilateral contract.

(attach more detail if the space provided is not sufficient)

N/A or other (please explain): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**APPENDIX F**  
**Eligible Biomass Fuel Source Plan**  
**(Required of all Applicants Proposing to Use An Eligible Biomass Fuel)**

**STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION**  
**Part of Application for Certificate of Eligibility**  
**RENEWABLE ENERGY RESOURCES ELIGIBILITY FORM**  
**Pursuant to the Renewable Energy Act**  
**Section 39-26-1 et. sq. of the General Laws of Rhode Island**

**Note to Applicants:** Please refer to the RES Certification Filing Methodology Guide posted on the Commission's web site ([www.ripuc.org/utilityinfo/res.html](http://www.ripuc.org/utilityinfo/res.html)) for information, templates and suggestions regarding the types and levels of detail appropriate for responses to specific application items requested below. Also, please see Section 6.9 of the RES Regulations for additional details on specific requirements.

The phrase "Eligible Biomass Fuel" (per RES Regulations Section 3.6) means fuel sources including brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, shavings, slash, yard trimmings, site clearing waste, wood packaging, and other clean wood that is not mixed with other unsorted solid wastes<sup>5</sup>; agricultural waste, food and vegetative material; energy crops; landfill methane<sup>6</sup> or biogas<sup>7</sup>, provided that such gas is collected and conveyed directly to the Generation Unit without use of facilities used as common carriers of natural gas; or neat bio-diesel and other neat liquid fuels that are derived from such fuel sources.

In determining if an Eligible Biomass Generation Unit shall be certified, the Commission will consider if the fuel source plan can reasonably be expected to ensure that only Eligible Biomass Fuels will be used, and in the case of co-firing ensure that only that proportion of generation attributable to an Eligible Biomass Fuel be eligible. Certification will not be granted to those Generation Units with fuel source plans the Commission deems inadequate for these purposes.

This Appendix must be attached to the front of Applicant's Fuel Source Plan required for Generating Units proposing to use an Eligible Biomass Fuel (per Section 6.9 of RES Regulations).

<sup>5</sup> Generation Units using wood sources other than those listed above may make application, as part of the required fuel source plan described in Section 6.9 of the RES Regulations, for the Commission to approve a particular wood source as "clean wood." The burden will be on the applicant to demonstrate that the wood source is at least as clean as those listed in the legislation. Wood sources containing resins, glues, laminates, paints, preservatives, or other treatments that would combust or off-gas, or mixed with any other material that would burn, melt, or create other residue aside from wood ash, will not be approved as clean wood.

<sup>6</sup> Landfill gas, which is an Eligible Biomass Fuel, means only that gas recovered from inside a landfill and resulting from the natural decomposition of waste, and that would otherwise be vented or flared as part of the landfill's normal operation if not used as a fuel source.

<sup>7</sup> Gas resulting from the anaerobic digestion of sewage or manure is considered to be a type of biogas, and therefore an Eligible Biomass Fuel that has been fully separated from the waste stream.

F.1 The attached Fuel Source Plan includes a detailed description of the type of Eligible Biomass Fuel to be used at the Generation Unit.

Detailed description attached?  Yes  No  N/A

Comments: Only Landfill Methane Gas is being used

F.2 If the proposed fuel is "other clean wood," the Fuel Source Plan should include any further substantiation to demonstrate why the fuel source should be considered as clean as those clean wood sources listed in the legislation.

Further substantiation attached?  Yes  No  N/A

Comments: \_\_\_\_\_

F.3 In the case of co-firing with ineligible fuels, the Fuel Source Plan must include a description of (a) how such co-firing will occur; (b) how the relative amounts of Eligible Biomass Fuel and ineligible fuel will be measured; and (c) how the eligible portion of generation output will be calculated. Such calculations shall be based on the energy content of all of the proposed fuels used.

Description attached?  Yes  No  N/A

Comments: no co-firing

F.4 The Fuel Source Plan must provide a description of what measures will be taken to ensure that only the Eligible Biomass Fuel are used, examples of which may include: standard operating protocols or procedures that will be implemented at the Generation Unit, contracts with fuel suppliers, testing or sampling regimes.

Description provided?  Yes  No  N/A

Comments: \_\_\_\_\_

F.5 Please include in the Fuel Source Plan an acknowledgement that the fuels stored at or brought to the Generation Unit will only be either Eligible Biomass Fuels or fossil fuels used for co-firing and that Biomass Fuels not deemed eligible will not be allowed at the premises of the certified Generation Unit. And please check the following box to certify that this statement is true.

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_ Fuel is generated and collected on site, it is not brought to the site and stored

F.6 If the proposed fuel includes recycled wood waste, please submit documentation that such fuel meets the definition of Eligible Biomass Fuel and also meets material separation, storage, or handling standards acceptable to the Commission and furthermore consistent with the RES Regulations.

Documentation attached?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

F.7 Please certify that you will file all reports and other information necessary to enable the Commission to verify the on-going eligibility of the renewable energy generators pursuant to Section 6.3 of the RES Regulations.

← check this box to certify that the above statement is true

N/A or other (please explain) \_\_\_\_\_  
\_\_\_\_\_

F.8 Please attach a copy of the Generation Unit's Valid Air Permit or equivalent authorization.

Valid Air Permit or equivalent attached?  Yes  No  N/A

Comments: \_\_\_\_\_  
\_\_\_\_\_

F.9 Effective date of Valid Air Permit or equivalent authorization:

  10   /   23   / 2008

F.10 State or jurisdiction issuing Valid Air Permit or equivalent authorization:

  New York  

The Rhode Island Renewable Energy Standard Section 3.6 qualifies landfill gas, as an "eligible biomass fuel." The Chautauqua LFGE facility (the Facility") will be using landfill gas as the fuel source for the electricity generated by the Facility. The landfill gas used at the Facility is the result of "the natural decomposition of waste, and that would otherwise be vented or flared as part of the landfill's normal operation if not used as a fuel source."

To assure that only the eligible landfill gas is used at the Facility, the Facilities generators are monitored twenty four a day by PLC controls and SCADA systems. The Gas is continuously monitored by a gas analyzer and can be viewed by the SCADA system. In additions operators do daily inspections of the generators, as well as take daily samples of the gas with a gas meter to ensure the gas is eligible quality landfill gas.

As for collection and bring only eligible landfill gas to the generators, the Facility is located at the site of the source landfill. The source landfill has a series of gas wells and horizontal collectors that go to a main gas header. The header connects to the Facility where blowers draw the landfill gas to the Facility. No common carrier pipes are used.

The Facility is not “co-fired” with ineligible fuels, only with eligible landfill gas. In addition, only eligible landfill gas is brought to the Facility’s generator.

*Certification of Authorized Representative*

October 20, 2009  
Rhode Island Public Utilities Commission  
89 Jefferson Blvd.  
Warwick, RI 02888  
Attn: Renewable Energy Resources Eligibility

I, Scott Henningham, Chief Financial Officer of Innovative Energy Systems, LLC certify that Patricia Stanton as Vice President, Clean Energy Markets is the Authorized Representative for the Chautauqua LFGE facility named in Section 1.8 of the Rhode Island Renewable Energy Resources Eligibility Form and is authorized to execute The Standard Application Form for the Chautauqua Landfill Gas Facility.

Signature:

  
\_\_\_\_\_

Date:

  
\_\_\_\_\_

**Agreement for the Purchase and Sale of Energy  
Proprietary and Confidential**

November 25, 2009

This agreement confirms the transaction between Seneca Energy II, LLC and Innovative Energy Systems, LLC. regarding the sale and purchase of the Product under the terms and conditions as follows (“the Agreement”). Hereinafter Seneca Energy II, LLC and Innovative Energy Systems, LLC may be referred to, individually, as a “Party” and, collectively as the “Parties.”

Buyer: Seneca Energy II, LLC

Seller: Innovative Energy Systems, LLC.

Term: April 1, 2010 through December 31, 2030

Definition: “Energy” means the energy associated with one (1) megawatt hour (MWh) of energy from a renewable energy source with the renewable energy attributes and means three-phases, 60-cycle alternating current electric energy, expressed in megawatt hours.

Facility Name: Chautauqua LFGGE

**Contract**

Quantity: Seneca Energy II, LLC will purchase and receive and Innovative Energy Systems, LLC. will sell and deliver the entire output of the Chautauqua LFG facility. Quantity will vary hour to hour based on Chautauqua LFG’s production, but will be at a maximum of Chautauqua LFG’s capacity. Chautauqua LFG’s capacity is 6.4MW’s.

**Product**

and Delivery: Seller will deliver the Energy to the Buyer, and Buyer will pay Seller the difference between the day ahead Locational Marginal Price (“LBMP”) at the Delivery Point, defined below, as published each hour by the ISO-NE, and the Facility, defined below, interconnection day ahead market price, as published each hour by NY-ISO.

Seller’s failure to deliver shall be excused if the Seller’s Facility is unavailable as a result of a Forced Outage (as defined in the NERC Generating Unit Availability Data System (GADS) Forced Outage reporting guidelines).

Payment: As soon as practicable after the end of each month during the term hereof, Seller shall render to Buyer an invoice to be paid by the Buyer to Seller

for the Energy delivered during such month. Payments shall be due and payable on the fifteenth (15<sup>th</sup>) day after receipt of the invoice or, if such day is not a Business Day, then on the next Business Day.

If Buyer, in good faith, disputes the accuracy of a statement, Buyer shall provide a written explanation of the basis for the dispute and pay the undisputed amount. Upon determination of the corrected billing amount, the proper adjustment shall be paid or refunded within (5) Business Days after such determination.

Delivery Point: Sandy Pond

Facility, Location

And Resource: The source of the Energy shall be a Landfill Methane Gas to Energy generating resource. The facility has a name plate capacity of 6.4 MW and is located at 3889 Towerville Road, Jamestown NY 14701.

Double-Counting:

The Seller warrants that the environmental attributes of Energy has not otherwise been, nor will be sold, retired, claimed or represented as apart of electricity put or sales, or used to satisfy obligations in any jurisdiction.

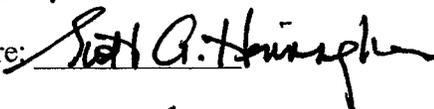
Confidentiality:

This Agreement and the General Terms and Conditions shall be considered "Proprietary and Confidential", except as required by law or legal process.

This Agreement constitutes part of and is subject to the attached General Terms and Conditions.

Innovative Energy Systems, LLC.

Name: Scott A. Henningham  
Title: CFO  
Date: 11/25/09

Signature: 

Seneca Energy II, LLC

Name: Peter Hzel  
Title: President  
Date: 11/25/09

Signature: 

**Agreement for the Purchase and Sale of Energy  
between Innovative Energy Systems, Inc., and Seneca Energy II, LLC,  
dated March 20, 2009  
GENERAL TERMS AND CONDITIONS**

**1) ACCEPTANCE/AGREEMENT**

The Agreement together with the General Terms and Conditions shall constitute the entire contract or agreement between Innovative Energy Systems, LLC., and Seneca Energy II, LLC.

**2) WARRANTY; REPRESENTATION**

Each Party represent and Warrants to the other Party that:

(a) at all times during the Term will have, all necessary power and authority to execute, deliver and perform its obligations hereunder;

(b) the execution, delivery and performance of this Agreement has been duly authorized by all necessary action and does not violate any of the terms or conditions of the Party's governing documents, or any contract to which it is a party, or any law, rule, regulation, order, judgment or other legal or regulatory determination;

(c) there is no pending or threatened litigation; arbitration or administrative proceeding that materially adversely affects the Party's ability to perform its obligations under this Agreement;

(d) this Contract constitutes its legally valid and binding obligation enforceable against it in accordance with its terms;

(e) it is not bankrupt and there are no proceeding pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt;

(f) it is a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

The Seller further Warrants to the Buyer that all Energy sold hereunder is delivered free and clear of all liens, encumbrances, and claims or any interest therein or thereto by any person arising prior to the Delivery Point.

**3) DELIVERY**

Subject to the terms and conditions of this Agreement, Seller shall sell and deliver, and Buyer shall purchase and receive, Energy at the Delivery Point, and Buyer shall pay the Price for the Energy delivered. Seller shall be responsible for any costs or charges imposed on or associated with the Energy up to the Delivery Point, including but not limited to transmission costs; and the Buyer shall be responsible for any costs

or charges imposed on or associated with the Energy or its receipt at and from the Delivery Point, including but not limited to transmission costs.

#### **4) EVENT OF DEFAULT AND DAMAGES**

**A)** For purposes of and during the Term of this Agreement, each of the following shall constitute an event of default ("Event of Default") by a Party (i) if a Party fails to make, when due, any payment required pursuant hereto if such failure is not remedied within seven (7) Business Days after written notice; or (ii) if a Party materially breaches any or all of its obligations as described in this Agreement and such breach is not cured within five (5) Business Days of written notice of such breach from the other Party; or (iii) if any representation or warranty made by a Party in Paragraph 2 of this Agreement proves to have been misleading or false in any material respect when made; or (iv) if a Party: makes an assignment or any general arrangement for the benefit of its creditors, files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors, or has such a petition filed against it, or becomes unable to pay its debts as they fall due.

**B)** Unless excused by Force Majeure or Seller's material failure to perform, if Buyer fails to accept all or any part of the quantity of Product to be delivered under this Agreement, Buyer shall pay Seller for such deficiency an amount equal to the positive difference, if any, obtained by subtracting the Sales Price from the Energy Price plus reasonable legal costs incurred by Seller in enforcement and protection of its rights under this Agreement. "Sales Price" means the price, determined by Seller in a commercially reasonable manner, at which Seller resells (if at all) the Energy, or, absent such a sale, the maker price for such quantity of Energy at or during the time that Buyer fails to accept the Energy.

**C)** Unless excused by Force Majeure or Buyer's material failure to perform, if Seller fails to deliver all or any part of the quantity of Energy to be delivered under this Agreement, Seller shall pay Buyer for such deficiency an amount equal to the positive difference, if any, obtained by subtracting the Energy Price from the Replacement Price plus reasonable legal costs incurred by Buyer in enforcement and protection of its rights under this Agreement. "Replace Price" means the price, determined by Buyer in a commercially reasonable manner, at which Buyer purchases (if at all) substitute Energy for the deficiency or, absent such a purchase, the market price for such quantity of Energy at or during the time that the Seller fails to delivered the Energy.

**D)** Each Party hereby stipulates that the payment obligations set forth in (B) and (C) above are reasonable in light of the anticipated harm and each Party hereby waives the right to contest such payments as an unreasonable penalty or otherwise. The remedy set forth in (B) and (C) of this Paragraph 4 shall be the sole and exclusive remedy of the aggrieved Party for the failure of the other to deliver or accept, as the case may be, the quantity of Energy specified herein and all other damages and

remedies are hereby waived as to such failures(s), except as set forth in Section E below.

E) No waiver of remedies or damages herein shall apply to claim of anticipatory repudiation or remedies thereof provided by law, except that neither Seller no Buyer shall be liable to the other for consequential, incidental, punitive, exemplary or indirect damages, lost profits, or business interruption damages, whether by statute, in tort or in contract, under any indemnity provisions or otherwise.

#### **5) ASSIGNMENT**

This Agreement is not assignable by either Party, except as provided herein, without the prior written consent of the non-assigning Party, which consent shall not be unreasonably withheld, delayed or conditioned.

#### **6) SEVERABILITY**

If any article, section, phrase or portion of this Agreement is, for any reason, held or adjudged to be invalid, illegal or unenforceable by any court of competent jurisdiction, such article, section, phrase, or portion so adjudged will be deemed separate, severable and independent and the remainder of this Agreement shall remain in full force and effect and shall not be invalidated or rendered illegal or unenforceable or otherwise affected by such adjudication, provided that the basic purpose of this Agreement and the benefits to the Parties are not substantially impaired.

#### **7) WAIVER**

No delay or omission by a Party in the exercise of any right under this Agreement shall be taken, construed or considered as a waiver or relinquishment thereof, and any such right may be exercised from time to time and as often as may be deemed expedient. If any of the terms and conditions hereof are breached and thereafter waived by a Party, such waiver shall be limited to the particular breach so waived and is not deemed to waive any other breach hereunder.

#### **8) GOVERNING LAW; VENUE**

This Agreement and the rights and duties of the Parties hereunder shall be governed by and shall be construed, enforced and performed in accordance with the laws of the State of New York, without regard to principles of conflicts of law. Each Party hereto irrevocably (i) submits to the non-exclusive jurisdiction of the federal and state courts located in the State of New York; (ii) waives any objection which it may have to the laying of venue of any proceedings brought in any such court; and (iii) waives any claim that such proceedings have been brought in an inconvenient forum.

## **9) FORCE MAJEURE**

Neither Party shall be liable to the other Party for failure of or delay in performance of any obligation under this Agreement, directly or indirectly, owing to acts of God, war, war-like condition, embargoes, riots, acts of terrorism, strike and other events not within its reasonable control or the result of the negligence of the claiming Party. In the event that such failure or delay occurs, the affected Party shall notify the other Party of the occurrence thereof as soon as possible and the Parties shall discuss the best way to resolve the event of force majeure.

## **10) ENTIRE AGREEMENT**

This Agreement completely and fully supersedes all other understandings or agreements, both written and oral, between the Parties relating to the subject matter hereof.

## **11) AMENDMENT; BINDING EFFECT**

This Agreement may not be amended, changed, modified, or altered unless such amendment, change, modification, or alteration is in writing and signed by both of the Parties to this Agreement. This Agreement shall inure to the benefit of and shall be binding upon the Parties and their respective successors and permitted assigns.

## **12) NOTICES**

Any notice, demand, or request required or authorized by this Agreement to be given by one Party to another Party shall be in writing. It shall either be sent by facsimile (with receipt confirmed by telephone and electronic transmittal receipt), courier, personally delivered (including overnight delivery service) or mailed, postage prepaid, to the representative of the other Party. Any such notice, demand, or request shall be deemed to be given (i) when sent by facsimile confirmed by telephone and electronic transmittal receipt, (ii) when actually received if delivered by courier or personal delivery (including overnight delivery service) or (iii) seven (7) days after deposit in the United States mail, if sent by first class mail return receipt requested.

## **13) GOVERNMENTAL CHARGES AND TAXES**

Seller shall pay or cause to be paid all taxes imposed by any government authority ("Governmental Charges") on or with respect to the Product arising prior to the Delivery Point. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Energy at and from the Delivery Point (other than income taxes which are directly related to the sale of the Product and are, therefore, the responsibility of the Seller). In the event one Party is required by law or regulation to remit or pay Governmental Charges that are the responsibility of the other Party hereunder, the responsible party shall promptly reimburse the paying Party for such Governmental Charges. Nothing shall obligate or cause a Party to pay or be liable to

pay any Governmental Charges for which it is exempt under law and timely asserts and diligently pursues such exemption, until final determination thereof.

#### **14) TITLE AND RISK OF LOSS**

Title to and risk of loss related to Product shall transfer from Seller to Buyer at the Delivery Point.

#### **15) INDEMNITY**

Each Party shall indemnify, defend and hold harmless the other Party from and against any Claims arising from or out of any event, circumstance, act or incident first occurring or existing during the period when control and title to the Energy vested in such Party. Each Party shall indemnify, defend and hold harmless the other Party against any Governmental Charges for which such Party is responsible under Paragraph 13.

#### **16) NETTING AND SETOFF**

If the Parties are required to pay an amount on the same date each to the other under this Agreement, such amounts shall be netted, and the Party owing the greater aggregate amount shall pay to the other Party any difference between the amounts owed. Each Party reserves all rights, setoffs, counterclaims and other remedies and defenses (to the extent not expressly herein or therein waived or denied) that such Party has or to which such Party may be entitled arising from or out of this Agreement. All outstanding obligations to make payment under this Agreement may be netted against each other, set off or recouped there from, or otherwise adjusted.



**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air Title V Facility  
Permit ID: 9-0636-00006/00017  
Effective Date: 10/29/2008 Expiration Date: 10/28/2013

Permit Issued To: CHAUTAUQUA COUNTY  
3 N ERIE ST  
MAYVILLE, NY 14757-1007

Facility: CHAUTAUQUA COUNTY LANDFILL  
3889 TOWERVILLE RD  
ELLERY CENTER, NY 14701

Contact: KEITH STOCK  
CHAUTAUQUA COUNTY DPF  
3889 TOWERVILLE RD  
JAMESTOWN, NY 14701-9653  
(716) 985-4785

Description:

Chautauqua County, New York owns and operates the Chautauqua County Landfill, an existing solid waste landfill located on a 790 acre parcel in the Town of Ellery, New York. The landfill was opened in the year 1981 and has a total design capacity of 5.9 million megagrams (MG). The total landfill footprint is 83.5 acres.

Landfill gas that is currently generated by the Chautauqua County Landfill as a result of the degradation of solid waste is collected by an active landfill gas collection system and destructed in a single open candlestick flare.

**PROJECT DESCRIPTION:**

The current permit action incorporates two permit changes including: (1) the Title V permit renewal, and (2) a major permit modification.

The permit renewal consists primarily of new and revised regulatory requirements and updates pertaining to existing equipment and operational changes. The major permit modification includes a proposal to construct and operate a 9.6 megawatt Landfill Gas to Energy (LFGTE) Plant to utilize the landfill gas from the Chautauqua County Landfill as a source of fuel. The LFGTE plant will be the primary landfill gas pollution control system. The LFGTE plant will collect and convert landfill gas into electricity for sale on the open market. The LFGTE Plant will consist of six (6) G3520C Caterpillar stationary internal combustion engines. Any residual collected landfill gas



beyond the capacity of the engines will be combusted in the existing flare control system.

The proposed LFGTE plant will be owned by Chautauqua County and located at the Chautauqua County Landfill near the existing open candlestick flare. The LFGTE plant will be operated by Innovative Energy Systems, Inc. under agreement with Chautauqua County.

### **EMISSIONS AND CONTROLS**

Landfill gas consists primarily of methane, carbon dioxide (CO<sub>2</sub>) and nitrogen. Oxygen, sulfur-bearing compounds, non-methane organic compounds (NMOC) and hazardous air pollutants (HAPs) are present in the generated gas in much smaller quantities. The quantities and types of compounds present in the landfill gas are dependent on the composition of the wastes placed in the landfill and site-specific conditions. On June 29, 2007, Chautauqua County collected and analyzed a landfill gas sample for several specific compounds. In comparison with the default concentrations of landfill constituents reported in AP-42, only one compound was found at an elevated concentration which included hydrogen sulfide at a concentration of 397 ppmv. All other compounds were observed at concentrations less than the AP-42 default values. Several compounds were not present above the detection limit of the methods.

The combustion of landfill gas in the existing flare and the proposed engines results in emissions of carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), and NMOC, which includes some volatile organic compounds (VOCs) and HAPs.

The landfill gas will be pre-treated by a scrubbing system to clean the gas stream prior to combustion in the engines. The pre-treatment system will include filtering, dewatering and compression processes. The landfill gas is not pre-treated prior to combustion in the flare.

### **APPLICABLE REQUIREMENTS:**

*6NYCRR Part 202-1 - Required Emission Tests:*

The design emission rates of the internal combustion engines for nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) are 0.6 grams per brake horsepower-hour (g/bhp-hr) and 3.0 g/bhp-hr, respectively. The design emission rates were used to assess the non-applicability of the facility to New Source Review (6NYCRR Part 231-2), Prevention of Significant Deterioration (40CFR52.21) and Reasonably Available Control Technology for Oxides of Nitrogen (6 NYCRR Part 227-2). The Department requires routine performance testing and periodic monitoring of the internal combustion engines to confirm the engines consistently operate within the design criteria.



*6NYCRR Part 208 - Landfill Gas Collection and Control Systems for Certain Municipal Solid Waste Landfills:*

On July 16, 2007 gas samples were collected from the main header of the Chautauqua County Landfill active gas collection system and analyzed for NMOC. Based on these results, Chautauqua County recalculated the NMOC emission rates from the landfill using LandGEM. The results were provided to the Department in January, 2008 and demonstrated the generated NMOC emission rate from the landfill is greater than 50 megagrams per year. In accordance with the regulation, Chautauqua County is now required to submit a collection and control system design plan to the Department within 1 year or by January 1, 2009. In addition, Chautauqua County is required to install the Department approved collection and control system within 30 months or by June 1, 2010.

As stated in 6NYCRR Part 208.3, the regulatory standards for operation of an open flare require the flare be designed and operated in accordance with 40 CFR Section 60.18. Chautauqua County must test the newly installed 10-inch flare to demonstrate compliance with 40 CFR Section 60.18 within 60 days after achieving the maximum production rate but not later than 180 days after initial start-up of the LFGTE plant.

The regulatory standards for combusting the landfill gas in stationary internal combustion engines to produce electricity require that a gas pre-treatment system be utilized. The governing EPA rule, identified as 40CFR60 Subpart Cc - Emission Guidelines, and 6NYCRR Part 208 currently do not provide sufficient details about the requirements for a pre-treatment system. EPA has recognized the need for more detailed requirements and has proposed changes to the rule on September 8, 2006. The proposed changes have been incorporated into this permit as described below in 40CFR60 Subpart Cc.

*Proposed Amendments to 40 CFR60 Subpart Cc - Emission Guidelines for Municipal Solid Waste Landfills:*

EPA clarified the definition of a treatment system by adding specific numerical values that would provide long-term protection of the combustion equipment, which would support good combustion. For particulate matter filtration, a filter system would be required to have an absolute rating no greater than 10 microns. For dewatering, the system would be required to reduce the dew point by at least 20 degrees Fahrenheit. In addition, EPA clarified the monitoring requirements for treatment systems. To ensure that treatment systems are operating properly to achieve the filtration and de-watering levels specified in the revised proposed treatment system definition, EPA proposed more specific monitoring, recordkeeping, and reporting requirements. EPA also proposed that



owners/operators of treatment systems monitor pressure drop across the filtration system and temperature or dew point for dewatering systems, depending on the type of de-watering system.

The permit requires Chautauqua County to submit a monitoring plan within 180 days of startup. The plan should provide documentation that the pre-treatment system satisfies the EPA definition and provide monitoring methods used for the filtering, dewatering and compression processes to ensure the treatment system operates as designed.

*6NYCRR Part 212 - General Process Emission Sources:*

Due to noted odor complaints and the need to evaluate the impact of the landfill on nearby receptors, an Air Quality Impact Evaluation was requested by the Department in March, 2007. The elements of the Air Quality Impact Evaluation included a landfill gas sampling program, air dispersion model analysis and ambient hydrogen sulfide monitoring program. The sampling program occurred on June 29, 2007. The ambient air quality impact analysis was completed in January, 2008 and demonstrated the facility emissions do not cause any exceedance of the short term guidance concentrations, annual guidance concentrations, or ambient air quality standards. Based on the results of the Air Dispersion Model Analysis, an ambient hydrogen sulfide monitoring program was not requested since the results were below the 6NYCRR Part 257-10 Ambient Air Quality Standard for Hydrogen Sulfide.

*6NYCRR Part 227-1.3(a) - Stationary Combustion Installations:*

Chautauqua County must operate the engines with less than 20 percent opacity (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with the opacity standard will be accomplished by completing weekly visible emission observations. Within 180 days of startup, Chautauqua County Landfill shall submit an Operation and Maintenance (O&M) plan for the engines. The O&M plan shall outline proper operation and maintenance procedures to minimize emissions from the engines. The plan shall include, but is not limited to: operation requirements, maintenance schedule, reporting, and recordkeeping.

*40CFR63 Subpart AAAA - National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills:*

Chautauqua County must comply with the startup, shutdown, and malfunction requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months including information on all deviations that occurred during the 6-month reporting period.

*40CFR60 Subpart JJJJ - Standards of Performance for Stationary Spark*



*Ignition Internal Combustion Engines:*

Chautauqua County must comply with the applicable requirements of this regulation.

*40CFR63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines:*

Chautauqua County must comply with the applicable requirements of this regulation.

**NON-APPLICABLE REQUIREMENTS:**

*6NYCRR Part 227-2 - Reasonably Available Control Technology (RACT) for Oxides of Nitrogen:*

The existing facility NO<sub>x</sub> emissions are emitted by the flare which results in a potential to emit (PTE) of 10 tons per year (tpy). The proposed LFGTE project has a NO<sub>x</sub> PTE of 69 tpy. The resulting facility-wide NO<sub>x</sub> PTE is 79 tpy which is less than the NO<sub>x</sub> RACT threshold of 100 tpy. As such, the combustion sources are not subject to the NO<sub>x</sub> RACT requirements of 6NYCRR Part 227-2.

*6NYCRR Part 231-2 - New Source Review (NSR):*

The existing facility is a non-major source of non-attainment area pollutants, including VOC and NO<sub>x</sub>. As such, the proposed project emissions were compared with the major source thresholds of 50 tpy VOC and 100 tpy NO<sub>x</sub>. The proposed project, by itself, is a minor source of VOC and NO<sub>x</sub> emissions. In addition, the facility remains a non-major source after the project is complete.

The total facility-wide VOC and NO<sub>x</sub> emissions, including emissions from the existing landfill and the proposed landfill gas to energy project, are 15 tpy VOC and 79 tpy NO<sub>x</sub>. Therefore, the facility is not a major source of non-attainment contaminants and is not subject to NSR requirements.

*40CFR52.21 - Prevention of Significant Deterioration (PSD):*

The existing facility is a minor source of attainment area pollutants including NO<sub>x</sub>, CO, SO<sub>2</sub>, and PM-10. As such, the proposed project emissions were compared with the major source threshold of 250 tpy to determine whether or not the project is subject to PSD for the attainment area pollutants. The project PTE's for all these contaminants were below 250 tpy and are as follows:

NO<sub>x</sub> = 69 tpy  
CO = 200 tpy  
SO<sub>2</sub> = 29 tpy  
PM-10 = 12 tpy

Thus, this project is not subject to PSD. However, total facility-wide PTE



emissions after the project is complete will be major for CO. Specifically, the existing facility CO emissions are emitted by the flare which results in a PTE of 190 tpy. The proposed LFGTE project has a CO PTE of 200 tpy. Both the existing facility and proposed project emissions, by themselves, are less than the major source threshold of 250 tpy. However, the resulting facility-wide CO PTE is 390 tpy which is greater than the major facility size threshold of 250 tpy. As such, the facility will be evaluated as an existing major source for any future PSD projects.

*Commissioner's Policy Number 33 (CP-33):*

Daily truck traffic will remain unchanged from the proposed project. Consequently, particulate emissions due to traffic including brake and tire wear will have no affect on the CP-33 applicability for the proposed project. However, particulate emissions from the proposed stationary combustion sources will increase but are not expected to increase the primary PM-10 emissions by 15 tpy or more. Therefore, no additional applicable requirements are imposed by the CP-33 policy.

*40CFR64 - Compliance Assurance Monitoring (CAM):*

Chautauqua County does not operate Pollutant-Specific Emission Units (PSEU) at a major source that use a control device to achieve compliance with any emission limitation or standard. Therefore, Chautauqua County Landfill is not subject to the Compliance Assurance Monitoring (CAM) requirements.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:  
  
PERMITS

DAVID S DENK  
DIVISION OF ENVIRONMENTAL  
  
270 MICHIGAN AVE  
BUFFALO, NY 14203-2999

Authorized Signature: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_\_\_



### Notification of Other State Permittee Obligations

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

**Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

**Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



## LIST OF CONDITIONS

### DEC GENERAL CONDITIONS

#### General Provisions

Facility Inspection by the Department  
Relationship of this Permit to Other Department Orders and  
Determinations  
Applications for permit renewals, modifications and transfers  
Applications for Permit Renewals and Modifications  
Permit modifications, suspensions or revocations by the Department  
Permit Modifications, Suspensions and Revocations by the Department

#### Facility Level

Submission of application for permit modification or renewal-REGION 9  
HEADQUARTERS



**DEC GENERAL CONDITIONS**

**\*\*\*\* General Provisions \*\*\*\***

**For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.**

**GENERAL CONDITIONS - Apply to ALL Authorized Permits.**

**Condition 1: Facility Inspection by the Department**

**Applicable State Requirement: ECL 19-0305**

**Item 1.1:**

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

**Item 1.2:**

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

**Item 1.3:**

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**Condition 2: Relationship of this Permit to Other Department Orders and Determinations**

**Applicable State Requirement: ECL 3-0301.2(m)**

**Item 2.1:**

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**Condition 3: Applications for permit renewals, modifications and transfers**

**Applicable State Requirement: 6NYCRR 621.11**

**Item 3.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item 3.2:**

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.



**Item 3.3:**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

**Condition 4: Applications for Permit Renewals and Modifications**

**Applicable State Requirement: 6NYCRR 621.13**

**Item 4.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item 4.2:**

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

**Item 4.3:**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

**Condition 5: Permit modifications, suspensions or revocations by the Department**

**Applicable State Requirement: 6NYCRR 621.13**

**Item 5.1:**

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**Condition 6: Permit Modifications, Suspensions and Revocations by the Department**

**Applicable State Requirement: 6NYCRR 621.14**

**Item 6.1:**

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:



- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**\*\*\*\* Facility Level \*\*\*\***

**Condition 7: Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS**  
**Applicable State Requirement: 6NYCRR 621.6(a)**

**Item 7.1:**

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator  
Region 9 Headquarters  
Division of Environmental Permits  
270 Michigan Avenue  
Buffalo, NY 14203-2999  
(716) 851-7165



**Permit Under the Environmental Conservation Law (ECL)**

**ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT**

**IDENTIFICATION INFORMATION**

Permit Issued To:CHAUTAUQUA COUNTY  
3 N ERIE ST  
MAYVILLE, NY 14757-1007

Facility: CHAUTAUQUA COUNTY LANDFILL  
3889 TOWERVILLE RD  
ELLERY CENTER, NY 14701

Authorized Activity By Standard Industrial Classification Code:  
1499 - NONMETALLIC MINERALS, NEC  
4953 - REFUSE SYSTEMS

Permit Effective Date: 10/29/2008

Permit Expiration Date: 10/28/2013



## LIST OF CONDITIONS

### DEC GENERAL CONDITIONS

#### General Provisions

Facility Inspection by the Department  
Relationship of this Permit to Other Department Orders and Determinations  
Applications for permit renewals, modifications and transfers  
Applications for Permit Renewals and Modifications  
Permit modifications, suspensions or revocations by the Department  
Permit Modifications, Suspensions and Revocations by the Department

#### Facility Level

Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS

### FEDERALLY ENFORCEABLE CONDITIONS

#### Facility Level

- 1 6NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6NYCRR 201-6.5(a)(7): Fees
- 3 6NYCRR 201-6.5(c): Recordkeeping and reporting of compliance monitoring
- 4 6NYCRR 201-6.5(c)(2): Monitoring, Related Recordkeeping, and Reporting Requirements.
- 5 6NYCRR 201-6.5(c)(3)(ii): Compliance Certification
- 6 6NYCRR 201-6.5(e): Compliance Certification
- 7 6NYCRR 202-2.1: Compliance Certification
- 8 6NYCRR 202-2.5: Recordkeeping requirements
- 9 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 10 6NYCRR 200.7: Maintenance of Equipment
- 11 6NYCRR 201-1.7: Recycling and Salvage
- 12 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6NYCRR 201-3.2(a): Exempt Sources - Proof of Eligibility
- 14 6NYCRR 201-3.3(a): Trivial Sources - Proof of Eligibility
- 15 6NYCRR 201-6.5(a)(4): Standard Requirement - Provide Information
- 16 6NYCRR 201-6.5(a)(8): General Condition - Right to Inspect
- 17 6NYCRR 201-6.5(d)(5): Standard Requirements - Progress Reports
- 18 6NYCRR 201-6.5(f)(6): Off Permit Changes
- 19 6NYCRR 202-1.1: Required Emissions Tests
- 20 6NYCRR 211.3: Visible Emissions Limited
- 21 40CFR 68: Accidental release provisions.
- 22 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 23 6NYCRR 201-6: Emission Unit Definition
- 24 6NYCRR 201-6.5(g): Non Applicable requirements
- 25 6NYCRR 208.3(b): Standards for Emissions from MSW Landfills
- 26 6NYCRR 208.4(a): Collection system for waste-in-place for 2 or 5 years
- 27 6NYCRR 208.4(b): Compliance Certification
- 28 6NYCRR 208.4(c): Compliance Certification
- 29 6NYCRR 208.4(c): Compliance Certification
- 30 6NYCRR 208.4(d): Compliance Certification
- 31 6NYCRR 208.5(a)(1)(i): NMOC Calculation - Waste Deposition KNOWN
- 32 6NYCRR 208.5(a)(1)(i): Compliance Certification



- 33 6NYCRR 208.5(b): System NMOC Emission Rate
- 34 6NYCRR 208.5(c): Use of emission factors
- 35 6NYCRR 208.5(d): System Efficiency
- 36 6NYCRR 208.6(a): Gas Collection System Compliance
- 37 6NYCRR 208.6(b): Well Placement
- 38 6NYCRR 208.6(c): Surface Methane Monitoring
- 39 6NYCRR 208.6(d): Instrument Specs for Surface Methane Analyzer
- 40 6NYCRR 208.7(a): Compliance Certification
- 41 6NYCRR 208.7(c): Open Flare with Electronic Ignition
- 42 6NYCRR 208.7(d): Monitoring of Operations - Other Control Devices
- 43 6NYCRR 208.7(f): Surface methane monitoring
- 44 6NYCRR 208.8(f): Compliance Certification
- 45 6NYCRR 208.8(g): Reporting Requirements
- 46 6NYCRR 208.9(a): Compliance Certification
- 47 6NYCRR 208.9(b): Compliance Certification
- 48 6NYCRR 208.9(c): Compliance Certification
- 49 6NYCRR 208.9(d): Compliance Certification
- 50 6NYCRR 208.9(e): Compliance Certification
- 51 6NYCRR 208.10: Compliance Certification
- 52 40CFR 63.1945, Subpart AAAA: Compliance Certification
- 53 40CFR 63.1955(b), Subpart AAAA: Compliance Certification
- 54 40CFR 63.1980(a), Subpart AAAA: Compliance Certification

**Emission Unit Level**

- 55 6NYCRR 201-6: Emission Point Definition By Emission Unit
- 56 6NYCRR 201-6: Process Definition By Emission Unit

**EU=1-LFGAS,Proc=GAS,ES=01FLR**

- 57 6NYCRR 208.3(b)(2)(iii)(a): Compliance Certification

**EU=1-LFGTE**

- 58 6NYCRR 202-1: Compliance Certification
- 59 6NYCRR 208.3(b)(2)(iii)(c): Compliance Certification
- 60 6NYCRR 227-1.3(a): Compliance Certification
- 61 40CFR 60, NSPS Subpart JJJ: Compliance Certification
- 62 40CFR 63.6590(a)(2), Subpart ZZZZ: Compliance Certification

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 63 ECL 19-0301: Contaminant List
- 64 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 65 6NYCRR 211.2: Air pollution prohibited



**FEDERALLY ENFORCEABLE CONDITIONS**

**\*\*\*\* Facility Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.**

**Item A: Emergency Defense - 6NYCRR Part 201-1.5**

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or

operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department

within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)**

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.



- Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)**  
Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.
- Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**  
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**  
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**  
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR Part 201-6.5(a)(5)**  
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item H: Property Rights - 6 NYCRR Part 201-6.5(a)(6)**  
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)**



If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

**Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)**

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

**Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)**

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the



effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

**Item L: Permit Exclusion - ECL 19-0305**

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.





- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.3 of this Part 201.

**Condition 4: Monitoring, Related Recordkeeping, and Reporting Requirements.**

**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 201-6.5(c)(2)**

**Item 4.1:**

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

**Condition 5: Compliance Certification**

**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 201-6.5(c)(3)(ii)**

**Item 5.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 5.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit



requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

(1) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

(2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.

(3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.

(4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If any of the above conditions are met, the source must notify the permitting authority by telephone or facsimile based on the timetable listed in paragraphs (1) through (4) of this section. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(d)(12), must be submitted within 10 working days of the occurrence. All deviations reported under paragraph (1) through (4) of this section must also be identified in the 6 month monitoring report required above.

If the permittee seeks to have a violation excused as provided in 201-1.4, the permittee shall report such violations as required under 201-1.4(b). However, in no





Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

- i. Compliance certifications shall contain:
  - the identification of each term or condition of the permit that is the basis of the certification;
  - the compliance status;
  - whether compliance was continuous or intermittent;
  - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
  - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions;and
  - such additional requirements as may be specified elsewhere in this permit related to compliance certification.
- ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.
- iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.
- iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2  
Air Compliance Branch  
290 Broadway  
New York, NY 10007-1866





used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

**Condition 9: Open Fires Prohibited at Industrial and Commercial Sites  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 215**

**Item 9.1:**

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, refuse, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS  
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

**The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period. [NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]**

**Condition 10: Maintenance of Equipment  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 200.7**

**Item 10.1:**

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

**Condition 11: Recycling and Salvage  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-1.7**

**Item 11.1:**

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

**Condition 12: Prohibition of Reintroduction of Collected Contaminants to  
the air  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-1.8**



**Item 12.1:**

No person shall unnecessarily remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

**Condition 13: Exempt Sources - Proof of Eligibility**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-3.2(a)**

**Item 13.1:**

The owner and/or operator of an emission source or unit that is eligible to be exempt may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other State and Federal air pollution control requirements, regulations, or law.

**Condition 14: Trivial Sources - Proof of Eligibility**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-3.3(a)**

**Item 14.1:**

The owner and/or operator of an emission source or unit that is listed as being trivial in this Part may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other State and Federal air pollution control requirements, regulations, or law.

**Condition 15: Standard Requirement - Provide Information**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-6.5(a)(4)**

**Item 15.1:**

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

**Condition 16: General Condition - Right to Inspect**  
**Effective between the dates of 10/29/2008 and 10/28/2013**



**Applicable Federal Requirement:6NYCRR 201-6.5(a)(8)**

**Item 16.1:**

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

- (i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and
- (iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**Condition 17: Standard Requirements - Progress Reports  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-6.5(d)(5)**

**Item 17.1:**

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

- (i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**Condition 18: Off Permit Changes  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-6.5(f)(6)**

**Item 18.1:**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the





1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center  
C/O CSC  
8400 Corporate Dr  
Carrollton, Md. 20785

**Condition 22: Recycling and Emissions Reduction**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:40CFR 82, Subpart F**

**Item 22.1:**

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

**The following conditions are subject to annual compliance certification requirements for Title V permits only.**

**Condition 23: Emission Unit Definition**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-6**

**Item 23.1:**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-LFGAS

Emission Unit Description:

Emission Unit 1-LFGAS consists of the landfill area that generates landfill gas (LFG), an active gas collection system (LFGCS), and an open flare (01FLR) to combust the LFG.

**Item 23.2:**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-LFGTE

Emission Unit Description:

Emission Unit 1-LFGTE consists of six (6) lean-burn Caterpillar, Inc. Model G3520C IC engines connected to individual electricity generators. The emission unit includes ancillary equipment that supports the electricity generation operations.



Building(s): ENGBLDG

**Condition 24: Non Applicable requirements  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 201-6.5(g)**

**Item 24.1:**

This section contains a summary of those requirements that have been specifically identified as being not applicable to this facility and/or emission units, emission points, processes and/or emission sources within this facility. The summary also includes a justification for classifying any such requirements as non-applicable.

**6NYCRR 227-2**

Reason: The existing facility nitrogen oxide (NO<sub>x</sub>) emissions emitted by the flare results in a potential to emit (PTE) of 10 tons per year (tpy). The proposed landfill gas to energy project has a NO<sub>x</sub> PTE of 69 tpy. The resulting facility-wide NO<sub>x</sub> PTE is 79 tpy which is less than the major facility size threshold of 100 tpy. As such, the combustion sources are not subject to the NO<sub>x</sub> RACT requirements of 6NYCRR Part 227-2.

**6NYCRR 231-2**

Reason: The existing facility is a non-major source of non-attainment area pollutants, including volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>). As such, the proposed project emissions were compared with the major source thresholds of 50 tons per year (tpy) VOC and 100 tpy NO<sub>x</sub>. The proposed project, by itself, is a minor source of VOC and NO<sub>x</sub> emissions. In addition, the facility remains a non-major source after the project is complete. The total facility-wide VOC and NO<sub>x</sub> PTE emissions, including emissions from the existing landfill and the proposed landfill gas to energy (LFGTE) project, are 15 tpy VOC and 79 tpy NO<sub>x</sub>. Therefore, the facility is not a major source of non-attainment contaminants and is not subject to New Source Review requirements.

**40CFR 52-A.21**

Reason: The existing facility is a minor source of attainment area pollutants including nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) and particulate matter less than 10 microns (PM-10). As such, the proposed project emissions were compared with the major source threshold of 250 tons per year (tpy) to determine whether or not the project is subject to Prevention of Significant Deterioration (PSD) for the attainment area pollutants. The project potential to emit (PTE) for all these contaminants were below 250 tpy and are as follows:

NO<sub>x</sub> = 69 tpy  
CO = 200 tpy





within the landfill, will be installed within 30 months after the first annual report in which the NMOC emission rate equals or exceeds 50 megagrams per year.

The active collection system will:

- be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
- collect gas from each area, cell or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active or 2 years or more if closed or at final grade;
- collect gas at a sufficient extraction rate;
- be designed to minimize off-site migration of subsurface gas.

**Condition 26:** Collection system for waste-in-place for 2 or 5 years  
Effective between the dates of 10/29/2008 and 10/28/2013

**Applicable Federal Requirement:**6NYCRR 208.4(a)

**Item 26.1:**

The owner or operator of this landfill gas collection system will operate the collection system such that gas is collected from each area, cell or group of cells in the landfill in which solid waste has been in place for 5 years or more if active or 2 years or more if inactive

**Condition 27:** Compliance Certification  
Effective between the dates of 10/29/2008 and 10/28/2013

**Applicable Federal Requirement:**6NYCRR 208.4(b)

**Item 27.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 27.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The collection system shall be operated with a negative pressure at each wellhead, except under the following conditions:

1. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 6 NYCRR Part 208.8.



2. The use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan.

3. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Department.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in 6 NYCRR Part 208.6(a)(3) through (5). If corrective actions are taken as specified in 6 NYCRR Part 208.6, the monitored exceedance is not a violation of the operational requirements in this section, however the permittee shall report these episodes as deviations.

Work Practice Type: PARAMETER OF PROCESS MATERIAL  
Process Material: LANDFILL GAS  
Parameter Monitored: PRESSURE  
Upper Permit Limit: 0 pounds per cubic inch  
Monitoring Frequency: MONTHLY  
Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2009.  
Subsequent reports are due every 6 calendar month(s).

**Condition 28: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.4(c)**

**Item 28.1:**  
The Compliance Certification activity will be performed for the Facility.

**Item 28.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Each interior wellhead in the collection system shall be operated with an oxygen level in the landfill gas less than 5%. The owner or operator may establish a higher operating oxygen level at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

If monitoring demonstrates that the operational



requirements are not met, corrective action shall be taken as specified in 6 NYCRR Part 208.6(a)(3) through (5). If corrective actions are taken as specified in 6 NYCRR Part 208.6, the monitored exceedance is not a violation of the operational requirements in this section, however the permittee shall report these episodes as deviations.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: LANDFILL GAS

Parameter Monitored: OXYGEN CONTENT

Upper Permit Limit: 5 percent

Monitoring Frequency: MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

**Condition 29: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.4(c)**

**Item 29.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 29.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees centigrade. The owner or operator may establish a higher operating temperature at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in 6 NYCRR Part 208.6(a)(3) through (5). If corrective actions are taken as specified in 6 NYCRR Part 208.6, the monitored exceedance is not a violation of the operational requirements in this section, however the permittee shall report these episodes as deviations.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: LANDFILL GAS

Parameter Monitored: TEMPERATURE

Upper Permit Limit: 55 degrees Centigrade (or Celsius)



Monitoring Frequency: MONTHLY  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2009.  
Subsequent reports are due every 12 calendar month(s).

**Condition 30: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 208.4(d)**

**Item 30.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 30.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: AMBIENT AIR MONITORING

Monitoring Description:

The collection system will be operated so that the methane concentration is less than 500 ppm above background on the surface of the landfill. The owner or operator will conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. A surface monitoring design plan will be developed that includes a topographical map with the monitoring route. This plan will be submitted to the Department for review and approval within 60 days of the issuance of this permit.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in 6 NYCRR Part 208.6(c). If corrective actions are taken as specified in 6 NYCRR Part 208.6(c)(4), the monitored exceedance is not a violation of the operational requirements in this section, however the permittee shall report these episodes as deviations.

Parameter Monitored: METHANE

Upper Permit Limit: 500 parts per million (by volume)

Monitoring Frequency: QUARTERLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 31: NMOC Calculation - Waste Deposition KNOWN**  
**Effective between the dates of 10/29/2008 and 10/28/2013**



**Applicable Federal Requirement: 6NYCRR 208.5(a)(1)(i)**

**Item 31.1:**

The following equation will be used to determine the NMOC emission rate, if the year-to-year solid waste acceptance rate is known:

$$M_{\text{NMOC}} = \sum_{i=1}^n \{2 k L_0 M_i e^{-kt_i} C_{\text{NMOC}} (3.6 \times 10^{-9})\};$$

where the NMOC emission rate is calculated for each cell (i) and n = the number of cells that are applicable to this rule and the other factors for this equation are used as defined in 6 NYCRR Part 208.5(a)(1)(i)

**Condition 32: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 208.5(a)(1)(i)**

**Item 32.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):  
 CAS No: 0NY998-20-0 NMOC - LANDFILL USE ONLY

**Item 32.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. Applicability and compliance determinations for certain regulations require the landfill to estimate landfill gas emission rates using the equation identified in Part 208.5(a)(1)(i) and to estimate the projected maximum gas generation flow rate using the equation specified in Part 208.6(a). The regulations evaluated for Chautauqua Landfill included the New York State Regulation for Controlling Gas Emissions from Landfills (6NYCRR Part 208), New Source Review (6NYCRR Part 231-2), and Prevention of Significant Deterioration (40CFR52.21).

2. The Landfill Gas Emissions Computer Model (LandGEM) uses these equations to generate the emissions and gas generation flow rates from the landfill. LandGEM relies on several input parameters to estimate emissions. The input parameters can either be site-specific data or default parameters if no site-specific data are available. Site-specific parameters used in LandGEM, which are



typically available, include the permitted waste design capacity of the landfill, the permitted or actual year-to-year solid waste acceptance rates and the actual NMOC concentration. The site-specific and default parameters used in the analysis for Chautauqua County included:

- (i) Permitted waste design capacity = 5,900,000 Mg;
- (ii) Maximum annual waste acceptance rate and alternate daily cover (ADC) equal to 380,896 tons per year.
- (iii) actual measured NMOC concentration = 292 ppmv as hexane
- (iv) Default values of  $Lo = 170 \text{ m}^3/\text{Mg}$ ,  $k = 0.05$ , methane concentration = 50%.

3. For the purposes of determining waste acceptance rates, waste shall include: municipal solid waste, industrial waste, construction and demolition debris, contaminated soil, sludge, tire waste, and any other solid waste material. Inert materials such as ash, asbestos and other materials may be excluded from the annual waste acceptance rate calculation upon written request and approval by the Region 9 Division of Air Resources. Such a request shall provide sufficient justification the waste in question is not degradable and does not contribute to landfill gas generation.

4. Chautauqua County Landfill shall maintain records to document the actual waste and ADC received per delivery. The combined total actual annual waste and ADC acceptance rates shall be determined by January 30 of each calendar year. The records shall be made available upon request from the Department during normal business hours.

5. If the combined total of the actual annual waste and ADC acceptance rate exceeds 380,896 tons, the facility shall input the actual rate into LandGEM and re-evaluate the emissions from the landfill. A report of the LandGEM results and re-evaluation of the applicability to 6NYCRR Part 231-2 and 40CRF52.21 shall be provided to the Department within 30 days of the recorded waste increase.

Monitoring Frequency: PER DELIVERY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 33: System NMOC Emission Rate**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.5(b)**

**Item 33.1:**

After installation of a collection and control system, the owner or operator will calculate the NMOC emission rate, for the purposes of determining when the system can be removed, using the following equation:

$M_{NMOC} = 1.89 \times 10^{-3} (Q_{LFG})(C_{NMOC})$ ; where  $M_{NMOC}$  = mass emission rate of NMOC (megagrams/year),  $Q_{LFG}$  (the flow of landfill gas to the system) is determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device and the concentration of NMOC ( $C_{NMOC}$ ) is determined by collecting and analyzing landfill gas using the procedures in Method 25, 25C or Method 18 of Appendix A of 40 CFR Part 60. The system may be removed if the NMOC emission rate drops below 50 megagrams per year.

**Condition 34: Use of emission factors**  
Effective between the dates of 10/29/2008 and 10/28/2013

**Applicable Federal Requirement: 6NYCRR 208.5(c)**

**Item 34.1:**

When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this section shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR section 51.166 or 52.21 (see section 200.9 of 6 NYCRR 200) using AP-42 or other approved measurement procedures

**Condition 35: System Efficiency**  
Effective between the dates of 10/29/2008 and 10/28/2013

**Applicable Federal Requirement: 6NYCRR 208.5(d)**

**Item 35.1:**

For the performance test required in 6 NYCRR Part 208.3(b)(2)(iii)(b), Method 25C, 25 or Method 18 of Appendix A of 40 CFR 60 shall be used to determine compliance with the 98% weight efficiency or the 20 ppmv outlet concentration level. The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = \frac{\text{NMOC}_{in} - \text{NMOC}_{out}}{\text{NMOC}_{in}}$$

**Condition 36: Gas Collection System Compliance**  
Effective between the dates of 10/29/2008 and 10/28/2013

**Applicable Federal Requirement: 6NYCRR 208.6(a)**

**Item 36.1:**

Except as provided in 6 NYCRR Part 208.3(b)(2)(i)(b), the specified methods in paragraphs (1) through (6) of this subdivision shall be used to determine whether the gas collection system is in compliance with 6 NYCRR Part 208.3(b)(2)(i).

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 6 NYCRR Part 208.3(b)(2)(ii)(a)(1), one of the





the equations in subparagraph (i) and (ii) of this paragraph. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in subparagraph (i) or (ii) of this paragraph or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with 6 NYCRR Part 208.3(b)(2)(ii)(a)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the department, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 6 NYCRR Part 208.3(b)(2)(ii)(a)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within five calendar days, except for the three conditions allowed under 6 NYCRR Part 208.4(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the department for approval.

(4) Owners or operators are not required to expand the system as required in paragraph (3) of this subdivision during the first 180 days after gas collection system startup.

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 6 NYCRR Part 208.4(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within five calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the department for approval.

(6) An owner or operator seeking to demonstrate compliance with 6 NYCRR Part 208.3(b)(2)(ii)(a)(4) through the use of a collection system not conforming to the specifications provided in 6 NYCRR Part 208.10, shall provide information satisfactory to the USEPA as specified in 6 NYCRR Part 208.3(b)(2)(i)(c) demonstrating that off-site migration is being controlled.

**Condition 37: Well Placement**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.6(b)**

**Item 37.1:**

For purposes of compliance with 6 NYCRR Part 208.4(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved



design plan as provided in 6 NYCRR Part 208.3(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

(1) five years or more if active; or

(2) two years or more if closed or at final grade.

**Condition 38: Surface Methane Monitoring**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.6(c)**

**Item 38.1:**

The following procedures shall be used for compliance with the surface methane operational standard as provided in 6 NYCRR Part 208.4(d).

1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 6 NYCRR Part 208.6(d)

2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. 3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of 40 CFR Part 60 Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in (i) through (v) below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 6 NYCRR Part 208.4(d).

i) The location of each monitored exceedance shall be marked and the location recorded.

ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in (5) below shall be taken, and no further monitoring of that location is required until the action specified in (5) has been taken.

iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in (ii) or (iii) above shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified



in (iii) or (v) shall be taken.

v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance.

An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis

**Condition 39: Instrument Specs for Surface Methane Analyzer  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.6(d)**

**Item 39.1:**

Each owner or operator seeking to comply with the provisions in 6 NYCRR Part 208.6(c) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of 40 CFR Part 60 Appendix A, except that "methane" shall replace all references to VOC.

2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of 40 CFR Part 60 Appendix A, the instrument evaluation procedures of section 4.4 of Method 21 shall be used.

4) The calibration procedures provided in section 4.2 of Method 21 of 40 CFR Part 60 Appendix A shall be followed immediately before commencing a surface monitoring survey

5) The provisions of 6 NYCRR Part 208.6(d) apply at all times, except during periods of start-up, shutdown or malfunction, provided that the duration of the start-up, shutdown or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

**Condition 40: Compliance Certification  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.7(a)**

**Item 40.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 40.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator seeking to comply with 6 NYCRR



Part 208.3(b)(2)(ii)(a) with an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

1. Measure the gauge pressure in the gas collection header, as provided in 6 NYCRR Part 208.6(a)(3); and
2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 6 NYCRR Part 208.6(a)(5); and
3. Monitor temperature of the landfill gas on a monthly basis as provided in 6 NYCRR Part 208.6(a)(5).

Monitoring Frequency: MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 41: Open Flare with Electronic Ignition**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.7(c)**

**Item 41.1:**

For landfills that use open flares to control landfill gas, the owner or operator of the landfill will install, calibrate, maintain and operate according to the manufacturer's specifications the following equipment:

1. A heat sensing device at the pilot light or flame itself to indicate the continuous presence of a flame or, for flares with electronic ignition, an indicator light to verify the presence of the ignition spark;
2. A device that records flow, at least every 15 minutes, to, or bypass of, the flare.

**Condition 42: Monitoring of Operations - Other Control Devices**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.7(d)**

**Item 42.1:**

For landfills that use a device other than an open flare or enclosed combustor to control the landfill gas, the owner or operator will provide information satisfactory to the Department describing the operation of the control device, the operating parameters that would indicate proper performance and appropriate monitoring procedures. The Department will review the information and either approve it or request that additional information be submitted.

**Condition 43: Surface methane monitoring**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.7(f)**

**Item 43.1:**



Each owner or operator seeking to demonstrate compliance with section 208.6(c) of this Part, shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in section 208.6(d) of this Part. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the monitoring frequency for that landfill to quarterly monitoring

**Condition 44: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 208.8(f)**

**Item 44.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 44.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator of a landfill seeking to comply with 6 NYCRR Part 208.3(b)(2) using an active collection system designed in accordance with 6 NYCRR Part 208.3(b)(2)(ii) shall submit to the Department annual reports of the recorded information in paragraphs (1) through (6) below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR Part 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 6 NYCRR Part 208.9(c).

- 1) Value and length of time for exceedance of applicable parameters monitored under 6 NYCRR Part 208.7(a), (b), (c) and (d).
- 2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 6 NYCRR Part 208.7.
- 3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
- 4) All periods when the collection system was not operating in excess of 5 days.
- 5) The location of each exceedance of the 500 parts per million methane concentration as provided in 6 NYCRR Part 208.4(c) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- 6) The date of installation and the location of each well



or collection system expansion added pursuant to 6 NYCRR Part 208.6(a)(3), 208.6(b) and 208.6(c)(4).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 45: Reporting Requirements**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.8(g)**

**Item 45.1:**

Each owner or operator seeking to comply with 6 NYCRR Part 208.3(b)(2)(iii) shall include the following information with the initial performance test report required under 40 CFR Part 60.8:

1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

6) The provisions for the control of off-site migration.

**Condition 46: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.9(a)**

**Item 46.1:**

The Compliance Certification activity will be performed for the Facility.



**Item 46.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in 6 NYCRR Part 208.3(b)(3)(i)(a), each owner or operator of an MSW landfill subject to the provisions of 6 NYCRR Part 208.3(b) shall keep for at least 7 years up-to-date, readily accessible, on-site records of the maximum design capacity report which triggered 6 NYCRR Part 208.3(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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: ANNUAL TOTAL

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 12 calendar month(s).

**Condition 47: Compliance Certification**

**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.9(b)**

**Item 47.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 47.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in 6 NYCRR Part 208.3(b)(2)(i)(b), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (1) and (2) below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 7 years. Records of the control device vendor specifications shall be maintained until removal.

1) Where an owner or operator seeks to demonstrate compliance with 6 NYCRR Part 208.3(b)(2)(ii):

i) The maximum expected gas generation flow rate as calculated in 6 NYCRR Part 208.6(a)(1). The owner or



operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Department.

ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 6 NYCRR Part 208.10(a)(1)).

2) Where an owner or operator seeks to demonstrate compliance with 6 NYCRR Part 208.3(b)(2)(iii) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR Part 60.18; continuous records of the flare pilot flame, or presence of ignition spark if an electronic ignition system is used for the flare, or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 48: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.9(c)**

**Item 48.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 48.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in 6 NYCRR Part 208.3(b)(2)(i)(b'), each owner or operator of a controlled landfill shall keep for 7 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 6 NYCRR Part 208.7) as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

2) Each owner or operator shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or



lock-and-key configurations used to seal bypass lines, specified under 6 NYCRR Part 208.7.

4) Each owner or operator seeking to comply by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring, or the presence of ignition spark if an electronic ignition system is used, specified under 6 NYCRR Part 208.7(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 49: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6 NYCRR 208.9(d)**

**Item 49.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 49.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in 6 NYCRR Part 208.3(b)(2)(i)(b), each owner or operator shall 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.

1) 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 6 NYCRR Part 208.6(b).

2) 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 6 NYCRR Part 208.10(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 6 NYCRR Part 208.10(a)(3)(ii).

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.



Subsequent reports are due every 6 calendar month(s).

**Condition 50: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.9(e)**

**Item 50.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 50.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in 6 NYCRR Part 208.3(b)(2)(i)(b), each owner or operator shall keep for at least 7 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 6 NYCRR Part 208.4, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 51: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 208.10**

**Item 51.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-20-0 NMOC - LANDFILL USE ONLY

**Item 51.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

§208.10 Specifications for active collection systems

(a) Each owner or operator seeking to comply with section 208.3(b)(2)(i) of this Part shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the USEPA as



provided in section 208.3(b)(2)(i)(c) and (d) of this Part:

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expendability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in paragraph (1) of this subdivision shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in paragraph (1) of this subdivision shall control all gas producing areas, except as provided by subparagraphs (i) and (ii) of this paragraph.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under section 208.9(d) of this Part. The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the department upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than one percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the department upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 k L_o M_i (e^{-kt_i}) \text{ CNMOC } (3.6 \times 10^{-9})$$

where,

$Q_i$  = NMOC emission rate from the  $i$  th section, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of the degradable solid waste in the  $i$ th section, megagram



$t_i$  = age of the solid waste in the  $i$  th section,  
years

CNMOC = concentration of nonmethane organic compounds,  
parts per million by volume

$3.6 \times 10^{-9}$  = conversion factor

(iii) The values for  $k$  and CNMOC, determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_0$  and CNMOC provided in section 208.5(a)(1)(i) of this Part or the alternative values from section 208.5(a)(5) of this Part shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in subparagraph (i) of this paragraph.

(b) Each owner or operator seeking to comply with section 208.3(b)(2)(i)(a) of this Part shall construct the gas collection devices using the following equipment or procedures:

(1) the landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration;

(2) vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so



as not to penetrate or block perforations;

(3) collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(c) Each owner or operator seeking to comply with section 208.3(b)(2)(i)(a) of this Part shall convey the landfill gas to a control system in compliance with section 208.3(b)(2)(iii) of this Part through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) for existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (2) of this subdivision shall be used; and

(2) for new collection systems, the maximum flow rate shall be in accordance with section 208.6(a)(1) of this Part.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 52: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 40CFR 63.1945, Subpart AAAAA**

**Item 52.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

**Item 52.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(f) If your landfill is an existing affected source and



is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

Chautauqua County Landfill must install a collection and control system in accordance with 6NYCRR Part 208.3(b) which states the approved collection and control system shall be installed within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year or by June 1, 2010. As such, compliance with this subpart, including development and implementation of a written startup, shutdown, and malfunction (SSM) plan shall be completed by June 1, 2010.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 53: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:40CFR 63.1955(b), Subpart AAAA**

**Item 53.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

**Item 53.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

If you are required by 40CFR60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of part 63 as specified in table 1 of Subpart AAAA.

The facility shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and



maintaining the source during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning process; and air pollution control and monitoring equipment used to comply with this standard.

This plan must be developed by the facility by the compliance date of 40CFR63, subpart AAAA (the landfill NESHAP) and must comply with all of the provisions as listed in §63.6(e)(3)(ii)-(ix) which includes the following provisions:

- During periods of startup, shutdown, and malfunction, the facility must operate and maintain the affected source in accordance with the procedures specified in the SSM plan.
- When actions taken by the owner/operator during a startup, shutdown, or malfunction are consistent with the procedures specified in the affected source's SSM plan, the owner/operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. In addition, the owner/operator must keep records of these events as specified in §63.10(b), including records of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner/operator shall confirm that actions taken during the startup, shutdown, and malfunction were consistent with the SSM plan in the semiannual report as required in §63.10(d)(5).
- If an action taken by the facility is not consistent with the SSM plan, and the affected source exceeds the relevant emission standard, then the owner/operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event.
- EPA or NYSDEC may at any time request in writing that the facility submit a copy of the SSM plan (or a portion thereof) which is maintained at the affected source. Upon receipt of such a request, the facility must promptly submit a copy of the requested plan to EPA or NYSDEC. EPA or NYSDEC must request that the facility submit a SSM plan whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. If the facility claims that any portion of such a SSM plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40CFR2.301, the material which is claimed as confidential must be clearly



designated in the submission.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 54: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 40CFR 63.1980(a), Subpart AAAA**

**Item 54.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 54.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator of a landfill seeking to comply with 40 CFR Part 60.752(b)(2) using an active collection system designed in accordance with 40 CFR Part 60.752(b)(2)(ii) shall submit to the Administrator semiannual reports of the recorded information in paragraphs (1) through (6) below. The initial semiannual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR Part 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR Part 60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR Part 60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR Part 60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of



the 500 parts per million methane concentration as provided in 40 CFR Part 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs 40 CFR Part 60.755(a)(3), (b), and (c)(4).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2009. Subsequent reports are due every 6 calendar month(s).

\*\*\*\* Emission Unit Level \*\*\*\*

Condition 55: Emission Point Definition By Emission Unit Effective between the dates of 10/29/2008 and 10/28/2013

Applicable Federal Requirement:6NYCRR 201-6

Item 55.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-LFGAS
Emission Point: FLARE
Height (ft.): 34 Diameter (in.): 10

Item 55.2:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-LFGTE
Emission Point: ENG01 Height (ft.): 28 Diameter (in.): 15
Emission Point: ENG02 Height (ft.): 28 Diameter (in.): 15 Building: ENGBLDG
Emission Point: ENG03 Height (ft.): 28 Diameter (in.): 15
Emission Point: ENG04 Height (ft.): 28 Diameter (in.): 15 Building: ENGBLDG
Emission Point: ENG05



Height (ft.): 28

Diameter (in.): 15

Building: ENGBLDG

Emission Point: ENG06

Height (ft.): 28

Diameter (in.): 15

Building: ENGBLDG

**Condition 56: Process Definition By Emission Unit  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 201-6**

**Item 56.1:**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-LFGAS

Process: FUG

Source Classification Code: 5-01-004-02

Process Description:

Process FUG includes the uncollected, fugitive landfill gas emissions from the entire landfill. It is estimated approximately 25% of the generated landfill gas is not collected.

Emission Source/Control: LNDFL - Process

**Item 56.2:**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-LFGAS

Process: GAS

Source Classification Code: 5-01-004-10

Process Description:

Process GAS includes the collected landfill gas from the gas collection system and the operation of the flare.

Emission Source/Control: 01FLR - Control

Control Type: FLARING

Emission Source/Control: LFGCS - Process

**Item 56.3:**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-LFGTE

Process: 001

Source Classification Code: 2-01-008-07

Process Description:

Process 001 consists of six (6) Caterpillar G3520C gas internal combustion (IC) engine generator sets. The six (6) IC engines have individual maximum heat input rates of 14.67 MMBtu/hr LHV (88.02 MMBtu/hr combined). At the minimum fuel quality utilization value of 420 Btu/cf (LHV), the maximum fuel use rate of each IC engine is approximately 580 cfm.





b.) §60.18(c)(2) - The flare shall be operated with a flame present at all times. The presence of a flame shall be monitored using a thermocouple or similar.

c.) §60.18(c)(3)(ii) - The flare shall be used only with the net heating value of the gas being combusted is 200 British Thermal Units per standard cubic foot (Btu/scf) or greater.

d.) §60.18(c)(4)(i) - The flare shall be designed for and operated with an exit velocity less than 60 ft/sec.

e.) §60.18(c)(4)(iii) - The flare is allowed to be operated with an exit velocity less than the velocity,  $V_{max}$ , and less than 400 ft/sec as determined by the methods specified in 40CFR60.18(f)(4) and (f)(5).

f.) §60.18(d) - Monitor the flare to ensure it is operated and maintained in conformance with the design;

g.) §60.18(e) - The flare shall be operated at all times when emissions may be vented to it;

2.) Chautauqua County must test the flare for compliance with 40CFR60.18 within 60 days after achieving the maximum production rate but not later than 180 days after initial start-up of the Landfill Gas to Energy Plant (LFGTE). A stack test protocol must be submitted 30 days prior to testing and a final test report submitted within 45 days after the testing is complete. The Department must be notified 10 days prior to the scheduled test date so a Department representative may be present during the test.

3.) A performance test of the flare for compliance with 40CFR60.18 shall be completed, at a minimum, every five years. More frequent performance testing may be required as determined necessary by the Department.

4.) Chautauqua County shall operate the landfill gas flare when gas is not being combusted in the LFGTE or when there is excess gas beyond the capacity of the engines.

5.) Chautauqua County shall maintain operating records and contact Department regional staff within 2 business days of all flare outages. Upon request, a letter shall be sent to the Department to document the cause of the event, a proposed plan for corrective action and a compliance schedule.



6.) Records of each certification shall be kept on-site and be made available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 58: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 202-1**

**Item 58.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 58.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permitted emission rates of the internal combustion engines for nitrogen oxides (NOx) and carbon monoxide (CO) are 0.6 grams per brake horsepower-hour (g/bhp-hr) and 3.0 g/bhp-hr, respectively. The permitted emission rates were used to assess the non-applicability of the facility to New Source Review (6NYCRR Part 231-2), Prevention of Significant Deterioration (40CFR52.21) and Reasonably Available Control Technology for Oxides of Nitrogen (6NYCRR Part 227-2). The Department requires routine performance testing and periodic monitoring of the internal combustion engines to confirm the engines consistently operate within the permitted levels.

**ROUTINE PERFORMANCE TESTING**

1.) A performance test to demonstrate compliance with the permitted emission rates of 0.6 g/bhp-hr NOx and 3.0 g/bhp-hr CO must be completed within 60 days after achieving the maximum production rate but not later than 180 days after initial start-up.

2.) The performance test shall be conducted on one of each similar engine type at the facility. The specific engine to be tested will be selected by the Department.



The test must be completed at the maximum normal operating load.

3.) The methods used to measure NO<sub>x</sub> and CO shall include EPA Methods 7 or 7E and EPA Method 10 from 40CFR60, Appendix A or another reference method approved by the Department.

4.) A performance test protocol shall be submitted to the Department for approval at least 60 days prior to completion of the test. The Department must be notified 10 days prior to the scheduled test date so a Department representative may be present during the test.

5.) A performance test report of the results shall be submitted to this office within 45 days of completion of the test. The test report must include a data quality review, which consists of a separate independent data quality review completed by a person having demonstrated expertise in reviewing stack test reports and associated test procedures. The ultimate purpose of this review is to determine acceptability of the results for determining compliance with applicable standards and/or requirements. The data quality review report must include the following:

a.) Whether test methods used followed those contained in the approved protocol and where variations occurred their acceptability under the test methods.

b.) Where problems occurred during testing, what corrective measures were used and the adequacy of those measures.

c.) Determination whether data quality is adequate for determining compliance with performance specifications.

d.) Determine whether the testing demonstrates compliance or noncompliance with emission limits and/or performance requirements.

6.) A performance test shall be completed, at a minimum, every five years on one engine from each similar engine type at the facility. More frequent performance testing may be required as determined necessary by the Department.

#### PERIODIC MONITORING

1.) NO<sub>x</sub> and CO stack emissions on each engine shall be analyzed on a routine basis using a portable combustion analyzer.

2.) Portable Combustion Analyzer - The suitability of the portable analyzer shall be approved by the Department. The preferred method for analyzing NO<sub>x</sub> is by



chemiluminescence. The preferred method for analyzing CO is infra-red (IR). Portable analyzers equipped with electrochemical cells such as a Testo 350 Portable Emission Analyzer are acceptable.

The analyzer shall be calibrated in accordance with the manufactures recommended procedures and schedule. A report for each calibration shall be kept on site and made available for Department review upon request. The analyzer shall be zeroed prior to each use following manufacture procedures.

3.) Sample collection - A permanent sample port shall be installed in each engine stack at a location to obtain a representative sample from the flow profile. To reduce uncertainties in the measurements, standard operating procedures shall be developed and implemented including: instructions on the assembly of the equipment, details of any leak checks, calibration procedures, and time to allow the instrument to stabilize. The sample collection and analysis shall be completed during normal operating conditions.

4.) Monitoring Frequency - The frequency of monitoring shall be determined based on the results of the most current performance test in relation to the permitted emission rate as follows (i.e, a performance test result of 2.4 g/bhp-hr CO requires periodic monitoring every 2 weeks since 2.4 is 80% of 3.0 g/bhp-hr):

| Performance test<br>% of permitted<br>emission<br>rate<br>----- | Monitoring<br>Frequency<br>----- |
|---|----------------------------------|
| 50% or less   | quarterly                        |
| 51 - 75%  | monthly                          |
| 76 - 80%  | every 2 weeks                    |
| 81 - 95%  | weekly                           |
| 96% - 100%  | daily                            |

5.) Recordkeeping - Records shall be maintained to include: (1) date and time of the measurement, (2) a log of the NOx and CO measurements in ppm, (3) conversion of the measurements into g/bhp-hr, and (4) description of adjustments made to the engine (if any). The records shall be kept on-site and be made available to the Department upon request.



6.) Reporting - If an exceedance of the permitted emission rates is documented during the performance testing or periodic monitoring, the facility shall report the results to the Department within 30 calendar days along with a proposed program for correction, including completion of a performance test (if determined necessary) and a schedule for compliance.

7.) Reporting - A summary of all periodic monitoring results shall be reported to the Department regional office on a quarterly basis.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 3 calendar month(s).

**Condition 59: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 6NYCRR 208.3(b)(2)(iii)('c')**

**Item 59.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY998-20-0 NMOC - LANDFILL USE ONLY

**Item 59.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1.) In accordance with 6NYCRR Part 208.3(b)(2)(iii)(c), route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of subclauses (b)(1) and (2) of this subparagraph as follows:

(b) a control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at three percent oxygen. The reduction efficiency or parts per million by volume shall be established by an



initial performance test to be completed no later than 180 days after the initial startup of the approved system using the test methods specified in section 208.5(d) of this Part;

(1) if a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone;

(2) the control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in section 208.7 of this Part

2.) On-going compliance monitoring of the landfill gas pre-treatment system for the stationary internal combustion engines shall be monitored as follows:

a.) Landfill gas that is collected and used for fuel in an engine or used for subsequent sale as a fuel shall be treated in a treatment system that has an absolute filtration rating of 10 microns or less, lowers the water dew point of the landfill gas by at least 20 degrees Fahrenheit with a de-watering process, and compresses the landfill gas.

b.) Chautauqua County Landfill shall operate the gas treatment system at all times when gas is routed to the engines for use or subsequent sale.

c.) Within 180 days of startup, Chautauqua County shall submit to the Department a monitoring plan for proper operation of the gas treatment system. The plan shall describe the monitoring methods used for the filtering, dewatering and compression processes to assure the treatment system operates as designed.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 60: Compliance Certification**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:6NYCRR 227-1.3(a)**

**Item 60.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

**Item 60.2:**

Compliance Certification shall include the following monitoring:



Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

- 1.) No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with the opacity standard may be determined by: (1) conducting observations in accordance with Reference Method 9; (2) evaluating Continuous Opacity Monitoring System (COMS) records and reports; and/or (3) considering any other credible evidence.
- 2.) On-going compliance monitoring of the opacity limit for the stationary internal combustion engines shall be monitored as follows:
  - a.) A weekly visible emission survey of each emission point shall be completed whenever an engine is in operation.
  - b.) Visible emission observations shall be performed, as best as possible, at a location to obtain the proper sun angle, background, and line of sight. The observer must be knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor);
  - c.) Document if visible emissions are observed and whether the emissions are within normal conditions or above normal conditions. Normal conditions may be zero percent opacity for many or all emission sources;
  - d.) If visible emissions above those that are normal and in compliance are observed, an inspection of the source shall be completed, corrective action taken, and the source restored to its normal operation as expeditiously as practicable.
  - e.) If visible emissions above those that are normal continue to be present after corrections are made, then a certified trained observer shall conduct a minimum six minute opacity observation according to EPA Method 9 within the next operating day of the source;
  - f.) If an exceedance of the 20 percent opacity limit is documented during the Method 9 opacity evaluations, then the facility shall notify the Department within two business days and provide a written report of the results within 30 calendar days along with a proposed program for correction and a schedule for compliance.



3.) Records shall be maintained and include the following information: date, time, staff name, results of the visible emission survey, results of any Method 9 evaluations (if applicable), results of each inspection, and a description of the corrective action taken (if applicable). The records shall be kept on-site and be made available to the Department upon request.

4.) Within 180 days of startup, Chautauqua County Landfill shall submit an Operation and Maintenance (O&M) plan for the engines. The O&M plan shall outline proper operation and maintenance procedures to minimize emission from the engines. The plan shall include, but is not limited to: operation requirements, maintenance schedule, reporting, and recordkeeping.

5.) Records shall be kept on-site and be made available to the Department upon request.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 61: Compliance Certification**

**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement:40CFR 60, NSPS Subpart JJJJ**

**Item 61.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

CAS No: 0NY998-00-0 VOC

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 61.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE):

1. In accordance with 40 CFR 60.4230(a)(4)(i), owners or



operators of stationary SI ICE that are ordered after June 12, 2006 and are manufactured after July 1, 2007 must comply with the emission standards in Table 1 as follows:

NO<sub>x</sub> = 3.0 g/HP-hr

CO = 5.0 g/HP-hr

VOC = 1.0 g/HP-hr

2. 40 CFR 60.4243 specifies the compliance requirements for owners and operators.
3. 40 CRR 60.4244 specifies the testing requirements for owners and operators.
4. 40 CFR 60.4245 specifies the notification, reports and record keeping requirements for owners and operators.
5. If Chautauqua County is an owner or operator of a SI ICE, then the applicable requirements for this regulation shall be determined and compliance maintained.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).

**Condition 62: Compliance Certification**

**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable Federal Requirement: 40CFR 63.6590(a)(2), Subpart ZZZZ**

**Item 62.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

**Item 62.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating



Internal Combustion Engines (RICE):

1. In accordance with 40 CFR 63.6595(a)(7), if you start up a new stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of the affected source.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

Subsequent reports are due every 6 calendar month(s).



**STATE ONLY ENFORCEABLE CONDITIONS**

**\*\*\*\* Facility Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability**

**Item A: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

**STATE ONLY APPLICABLE REQUIREMENTS**

**The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.**

**Condition 63: Contaminant List  
Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable State Requirement:ECL 19-0301**

**Item 63.1:**

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0  
Name: CARBON MONOXIDE

CAS No: 0NY100-00-0



Name: HAP

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0

Name: VOC

CAS No: 0NY998-20-0

Name: NMOC - LANDFILL USE ONLY

**Condition 64: Unavoidable noncompliance and violations**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable State Requirement:6NYCRR 201-1.4**

Item 64.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation



of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 65: Air pollution prohibited**  
**Effective between the dates of 10/29/2008 and 10/28/2013**

**Applicable State Requirement:6NYCRR 211.2**

**Item 65.1:**

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

New York State Department of Environmental Conservation

Permit ID: 9-0636-00006/00017

Facility DEC ID: 9063600006

