## PERMIT Under the Environmental Conservation Law (ECL)

#### **IDENTIFICATION INFORMATION**

Permit Type: Air Title V Facility
Permit ID: 9-0232-00003/00012

Mod 0 Effective Date: 02/25/2009 Expiration Date: 02/24/2014

Mod 1 Effective Date: Expiration Date:

Permit Issued To:HYLAND FACILITY ASSOCIATES

25 GREENS HILL LN RUTLAND, VT 05702

Contact: LARRY B LACKEY

NEW ENGLAND WASTE SERVICES OF N Y INC

408 E MONTPELIER RD MONTPELIER, VT 05602

(802) 224-0109

Facility: HYLAND LANDFILL

6653 HERDMAN RD ANGELICA, NY 14709

Contact: JOSEPH R BOYLES

HYLAND FACILITY 6653 HERDMAN RD ANGELICA, NY 14709

(585) 466-7271

#### Description:

#### **Proposed Project**

1.) Hyland Facility Associates (Hyland) is proposing an increase in the annual waste disposal limit from 312,000 tons per year (tpy) to 465,000 tpy at the Hyland Landfill located in Angelica, New York.

#### **Existing Facility Review**

1.)Hyland Landfill is subject to the New Source Performance Standards (NSPS) 40 CFR 60 Subpart WWW because the facility design capacity of 8.7 million megagrams (Mg) of solid waste is greater than the NSPS threshold of 2.5 million Mg. However, Hyland currently is not subject to the gas collection and control requirements of the NSPS because the estimated uncontrolled emission rate of non-methane organic compounds (NMOC) is less than the 50 Mg/yr threshold.



- 2.)Although not required by current air regulations, Hyland began operating an active landfill gas collection and control system in the year 2003 to reduce landfill gas emissions and odors at the facility. The collected landfill gas is controlled by a 3-engine landfill gas to energy plant (LFGTE) and/or a 3,000 cubic feet per minute (cfm) open flare.
- 3.) The existing landfill emissions, including fugitive emissions, using the current permitted waste acceptance rates in the year of maximum methane production indicate the facility is an existing major source for greenhouse gas (GHG) emissions. The facility GHG emissions or biogenic carbon dioxide equivalents (CO<sub>2</sub>e) include 95,375 tpy fugitive emissions and 72,805 tpy combustion related emissions. The sum of the fugitive and combustion emissions results in a total GHG emissions from the landfill of 168,180 tpy CO<sub>2</sub>e. This value is greater than the major facility threshold of 100,000 tpy CO<sub>2</sub>e; thus, Hyland is an existing major source for GHG emissions. Hyland is not major for any additional attainment or non-attainment contaminants.

#### **Proposed Project Review**

- 1.)The proposed increased waste placement rate results in a maximum increase of the landfill gas generation rate of about 574 cfm. This additional volume of gas will be controlled by the existing open flare. In addition, it is estimated the maximum landfill gas generation rate could occur seven (7) years earlier due to the proposed project.
- 2.) The emissions from the proposed project were evaluated for applicability to 6NYCRR Part 231 New Source Review (NSR). The emissions estimated from the landfill include: (1) combustion emissions of 75% of the landfill gas in the engines and flare, and (2) 25% of uncollected fugitive landfill gas.
- 3.)The proposed project was evaluated to determine applicability with 6NYCRR Part 231-8. It was determined the proposed project is a NSR major modification for GHG emissions. This was determined based on comparing the project emission potential (PEP) to the NSR significant project threshold. As shown below, the total PEP for GHG emissions is approximately 128,705 tpy which exceeds the significant project threshold of 75,000 tpy. The PEP was determined based on the difference between the baseline actual emissions of the existing facility and the projected actual emissions of the proposed increase of waste placement rate.

PEP PEP PEP Significant Combustion Fugitive Total Project Emissions Emissions Emissions Threshold



Contaminant	tpy	tpy	tpy	tpy
CO	46	NA	46	100
$NO_X$	8	NA	8	40
$SO_2$	12	NA	12	40
PM-10	2	NA	2	15
NMOC	0.3	4	4	50
VOC	0.1	7	7	40
H <sub>2</sub> S	0.1	3	3	10
GHG	55,713	72,992	128,705	75,000

- 4.) As required by 6NYCRR Part 231-8.7, the Department has determined the Best Available Control Technology (BACT) for GHG emissions from the Hyland Landfill includes:
- (a) Early implementation of the NSPS capture and control requirements than is specified in the NSPS with engines combusting the landfill gas to generate electricity and a backup open flare. Depending on the actual waste placement rates, early implementation of the NSPS may be 5 to 15 years sooner than is required;
- (b) Early implementation of the National Emission Standard for Hazardous Air Pollutants (NESHAP) Part 63 Subpart AAAA including the startup shutdown and malfunction (SSM) plan; and
- (c) Extended operation of the capture and control system beyond the NSPS closure requirements of less than 50 Mg per year. This may result in many years of operation of the capture and control system beyond the NSPS requirements.
- 5.)In October, 2007, Hyland was issued a permit modification limiting nitrogen oxides (NOx) and carbon monoxide (CO) emissions below NSR and Prevention of Significant Deterioration (PSD) thresholds of 100 tpy and 250 tpy, respectively. The prior NSR/PSD permit conditions require Hyland to operate the internal combustion engines at the design emission rates of 0.6 grams per brake horsepower-hour (g/bhp-hr) NOx and 3.0 g/bhp-hr CO. The Department requires routine performance testing every five (5) years and at least monthly periodic monitoring of the engines to confirm operation within the design criteria. The first performance test was completed on January 8, 2009. The next performance test is scheduled to be completed by December 31, 2013.
- 6.)The potential particulate emissions from both the stationary and mobile sources were reviewed in accordance with the Department's *CP-33 Policy Assessing and Mitigating Impacts of Fine Particulate Matter Emissions*. In general, the sources evaluated included: (1) landfill flare and engines, (2) waste hauling vehicles, (3) landfill operations equipment (4) construction heavy equipment, and (5) employee vehicles. The results indicate the potential increase of PM2.5 emissions due to this project do not exceed 15tpy. As such, in accordance with the CP-33 policy the project shall be deemed insignificant and no further assessment shall be required.



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:	CHARLES D CRANSTON	
	NYS DEC	
	182 EAST UNION ST	
	ALLEGANY, NY 14706	

\_\_\_\_\_/ \_\_\_\_/ \_\_\_\_\_

Authorized Signature:



#### **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 Permit modifications, suspensions or revocations by the Department Permit modifications, suspensions or revocations by the Department Permit modifications, suspensions or revocations by the Department

#### Facility Level

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



Facility DEC ID: 9023200003

## 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: 6 NYCRR 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



Facility DEC ID: 9023200003

Condition 1-1: Permit modifications, suspensions or revocations by the

Department

Applicable State Requirement: 6 NYCRR 621.13

#### Item 1-1.1:

The Department reserves the right to exercise all available authority 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 4: Permit modifications, suspensions or revocations by the Department Applicable State Requirement: 6 NYCRR 621.13

#### Item 4.1:

papers;

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
  - 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 1-2: Permit modifications, suspensions or revocations by the Department

**Applicable State Requirement:** 6 NYCRR 621.13

#### Item 1-2.1:

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



the permitted activity.

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

Condition 5: Submission of application for permit modification or renewal-REGION 9

**HEADQUARTERS** 

Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

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 14203-2915 (716) 851-7165



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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

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

#### **IDENTIFICATION INFORMATION**

Permit Issued To:HYLAND FACILITY ASSOCIATES 25 GREENS HILL LN RUTLAND, VT 05702

Facility: HYLAND LANDFILL

6653 HERDMAN RD ANGELICA, NY 14709

Authorized Activity By Standard Industrial Classification Code:

3519 - MANUFACTURE OF INTERNAL COMBUSTION ENGINES

4911 - ELECTRIC SERVICES 4953 - REFUSE SYSTEMS

Permit Effective Date: Permit Expiration Date:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### LIST OF CONDITIONS

#### FEDERALLY ENFORCEABLE CONDITIONS **Facility Level**

- 1-1 6 NYCRR 201-6.5 (a) (7): Fees
- 2 : Fees
- 9: Open Fires Prohibited at Industrial and Commercial Sites
- 1-2 6 NYCRR 215.2: Open Fires Prohibitions
- 1-3 6 NYCRR 202-1.1: Required Emissions Tests
- 19: Required Emissions Tests
- 20: Visible Emissions Limited
- 23 6 NYCRR Subpart 201-6: Emission Unit Definition
- 1-4 6 NYCRR 201-6.5 (g): Non Applicable requirements
- 1-5 6 NYCRR Subpart 201-7: Facility Permissible Emissions
- \*1-6 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 1-7 6 NYCRR 211.1: Air pollution prohibited
- 1-8 6 NYCRR 211.1: Compliance Certification
- 1-9 6 NYCRR Subpart 231-8: Compliance Certification
- 24 40CFR 60, NSPS Subpart WWW: Compliance Certification
- 1-10 40CFR 60.752(b)(2), NSPS Subpart WWW: Compliance Certification
- 1-11 40CFR 60.752(b)(2)(iii)('C'), NSPS Subpart WWW: Compliance Certification
- 1-12 40CFR 60.752(b)(2)(iii)('C'), NSPS Subpart WWW: Compliance Certification
- 1-13 40CFR 60.753(a), NSPS Subpart WWW: Compliance Certification
- 1-14 40CFR 60.753(b), NSPS Subpart WWW: Compliance Certification
- 1-15 40CFR 60.753(c), NSPS Subpart WWW: Compliance Certification
- 1-16 40CFR 60.753(c), NSPS Subpart WWW: Compliance Certification
- 1-17 40CFR 60.753(d), NSPS Subpart WWW: Compliance Certification 1-18 40CFR 60.753(e), NSPS Subpart WWW: Compliance Certification
- 1-19 40CFR 60.753(f), NSPS Subpart WWW: Compliance Certification
- 1-20 40CFR 60.753(g), NSPS Subpart WWW: Compliance Certification
- 1-21 40CFR 60.754, NSPS Subpart WWW: Compliance Certification
- 25 40CFR 60.754, NSPS Subpart WWW: Compliance Certification
- 1-22 40CFR 60.754(b), NSPS Subpart WWW: Compliance Certification
- 1-23 40CFR 60.754(d), NSPS Subpart WWW: Compliance Certification 1-24 40CFR 60.755(a), NSPS Subpart WWW: Compliance Certification
- 1-25 40CFR 60.755(b), NSPS Subpart WWW: Compliance Certification
- 1-26 40CFR 60.755(c), NSPS Subpart WWW: Compliance Certification
- 1-27 40CFR 60.755(d), NSPS Subpart WWW: Compliance Certification
- 1-28 40CFR 60.755(e), NSPS Subpart WWW: Compliance Provisions -Start-up, shutdown, or malfunction
- 1-29 40CFR 60.756(a), NSPS Subpart WWW: Compliance Certification
- 1-30 40CFR 60.756(c), NSPS Subpart WWW: Compliance Certification
- 1-31 40CFR 60.756(f), NSPS Subpart WWW: Compliance Certification
- 1-32 40CFR 60.757(d), NSPS Subpart WWW: Compliance Certification
- 1-33 40CFR 60.757(e), NSPS Subpart WWW: Compliance Certification
- 1-34 40CFR 60.757(f), NSPS Subpart WWW: Compliance Certification
- 1-35 40CFR 60.757(g), NSPS Subpart WWW: Compliance Certification
- 1-36 40CFR 60.758(a), NSPS Subpart WWW: Compliance Certification 1-37 40CFR 60.758(b), NSPS Subpart WWW: Compliance Certification
- 1-38 40CFR 60.758(c), NSPS Subpart WWW: Compliance Certification

**DRAFT** 



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

- 1-39 40CFR 60.758(d), NSPS Subpart WWW: Compliance Certification
- 1-40 40CFR 60.758(e), NSPS Subpart WWW: Compliance Certification
- 1-41 40CFR 60.759(a), NSPS Subpart WWW: Compliance Certification
- 1-42 40CFR 60.759(b), NSPS Subpart WWW: Compliance Certification
- 1-43 40CFR 60.759(c), NSPS Subpart WWW: Compliance Certification
- 27 40CFR 63.1945, Subpart AAAA: Compliance Certification
- 1-44 40CFR 63.1955(b), Subpart AAAA: Compliance Certification

#### **Emission Unit Level**

29 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

#### **EU=1-LFGTE**

- 30 : Compliance Certification
- 31: Compliance Certification
- \*1-45 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- \*1-46 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 32 : Compliance Certification
- 33 : Compliance Certification
- 1-47 6 NYCRR 227-1.3 (a): Compliance Certification
- 1-48 6 NYCRR Subpart 231-6: Compliance Certification

#### EU=1-LNDFL,Proc=FLR

- 34 : Compliance Certification
- 1-49 40CFR 60.756(c), NSPS Subpart WWW: Compliance Certification

#### EU=1-LNDFL,Proc=FUG

35 : Compliance Certification

## STATE ONLY ENFORCEABLE CONDITIONS Facility Level

- 36 ECL 19-0301: Contaminant List
- 37: Unavoidable noncompliance and violations
- 1-50 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 38: Air pollution prohibited
- 1-51 6 NYCRR 211.2: Visible Emissions Limited
- 39 : Compliance Demonstration
- 40 : Compliance Demonstration

NOTE: \* preceding the condition number indicates capping.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### 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 - 6 NYCRR 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 - 6 NYCRR 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 6 NYCRR Part 616 -Public Access to records and Section 114(c) of the Act.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR 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 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 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 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 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 201-6.5 (a) (6)

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### Item I: Severability - 6 NYCRR 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 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 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



#### New York State Department of Environmental Conservation Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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.

- 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.
- 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

(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.

#### Item M: Federally Enforceable Requirements - 40 CFR 70.6 (b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

## MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

**Condition 1-1:** Fees

**Effective for entire length of Permit** 

Applicable Federal Requirement: 6 NYCRR 201-6.5 (a) (7)

Replaces Condition(s) 2

#### Item 1-1.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

**Condition 2:** Fees

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Replaced by Condition(s) 1-1

#### Item 2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0302.

Condition 9: Open Fires Prohibited at Industrial and Commercial Sites

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Expired by Mod 1

#### **Item 9.1:**

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage,



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

refuse, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**Condition 1-2:** Open Fires - Prohibitions

**Effective for entire length of Permit** 

#### Applicable Federal Requirement: 6 NYCRR 215.2

#### Item 1-2.1:

Except as allowed by Title 6 NYCRR Section 215.3, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

#### Item 1-2.2

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

- (a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
- (l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

## 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 1-3:** Required Emissions Tests

Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 202-1.1

Replaces Condition(s) 19

#### Item 1-3.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

**Condition 19: Required Emissions Tests** 

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Replaced by Condition(s) 1-3

#### Item 19.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time. Such person shall bear the cost of measurement and preparing the report of measured emissions. Failure of such person to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny a certificate to operate.

Condition 20: Visible Emissions Limited

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Expired by Mod 1

#### Item 20.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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 02/25/2009 and Permit Expiration Date

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

#### **Item 23.1(From Mod 1):**

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

Emission Unit: 1-LFGTE Emission Unit Description:

Emission Unit 1-LFGTE includes the exhaust from three (3) caterpillar G3520 engines at Hyland's Landfill Gas To Energy (LFGTE) Plant.

Building(s): ENGBLDG

#### **Item 23.2(From Mod 1):**

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

Emission Unit: 1-LNDFL Emission Unit Description:

Emission Unit 1-LNDFL includes the landfill gas generated by Cells 1, 2, 3, 4 and 5 of the Hyland Facility Associates' municipal solid waste landfill. It is estimated that approximately 75% of the gas generated by the landfill will be collected and controlled by an active gas management system, and the remainder will be considered fugitive emissions.

## Condition 1-4: Non Applicable requirements Effective for entire length of Permit

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

#### Item 1-4.1:

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.

(From Mod 1) 6 NYCRR Subpart 227-2

Reason: Facility wide NOx PTE emissions are approximately 47 tons/yr which is less than the NOx RACT threshold of 100 tons/yr. Therefore, the combustion sources at the landfill are not subject to the NOx RACT requirements of 6NYCRR Part 227-2.

40 CFR Part 64

Reason: As stated in 40CFR64.2(b)(1)(i), the requirements of CAM shall not apply to emission limits or standards proposed



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act. The EPA published a proposal for regulation of new MSW landfills under section 111(b) and for existing MSW landfills under section 111(d) of the CAA in the Federal Register on May 30, 1991 (56 FR 24468). The resulting emission limits for municipal solid waste landfills became effective on March 12, 1996 under 40CFR60 Subpart WWW. The Hyland Landfill is subject to the requirements of Subpart WWW and is therefore, exempt from the CAM requirements of 40 CFR Part 64.

**Condition 1-5:** Facility Permissible Emissions

Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

#### Item 1-5.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 0NY750-00-0 (From Mod 1) PTE: 402,084,000

pounds per year

Name: CARBON DIOXIDE EQUIVALENTS

**Condition 1-6:** Capping Monitoring Condition

**Effective for entire length of Permit** 

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

#### Item 1-6.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 231-8

#### Item 1-6.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 1-6.3:

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.

#### Item 1-6.4:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 1-6.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 1-6.6:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-6.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

- (1) As required by 6 NYCRR Part 231-8.6, Hyland is limited to the projected actual emissions of 201,042 tons per year (tpy) carbon dioxide (CO2) equivalents for the proposed NSR major modification.
- (2) Hyland shall track incoming waste loads on a daily basis.
- (3) On a semi-annually basis (i.e., January 1 June 30 and July 1 -December 31), Hyland shall estimate and report the actual green house gas (GHG) emission rate in units of CO2 equivalents using the latest version of LandGEM. The report shall be due 30 days following the reporting period.

Parameter Monitored: CARBON DIOXIDE EQUIVALENTS

Upper Permit Limit: 201042 tons per year

Reference Test Method: LandGEM
Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-7: Air pollution prohibited
Effective for entire length of Permit



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### Applicable Federal Requirement: 6 NYCRR 211.1

#### Item 1-7.1:

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.

Condition 1-8: Compliance Certification
Effective for entire length of Permit

**Applicable Federal Requirement: 6 NYCRR 211.1** 

#### Item 1-8.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

#### Item 1-8.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) To address potential concerns related to fine particulate matter, Hyland Landfill shall implement a dust control plan as specified in the Facility Operation and Maintenance Manual, dated March 1, 2006, submitted as part of the Solid Waste permit application.
- (2) Dust control procedures include proper maintenance of vegetated areas and gravel service roads. This maintenance includes routine inspections of vegetated areas and the reseeding of areas where vegetative growth is not well established. Paved surfaces are to be cleaned as required to control accumulated dust. Dust is to be controlled on the facility access roads by the application of gravel as needed and by routine watering.
- (3) A cattle guard and rumble strip have been provided on the access road to aid in removal of soil from the tires of vehicles leaving the facility. These are to be cleaned regularly. In addition, the access road is to be swept on an as-needed basis.
- (4) The landfill operator shall assess the appropriate dust control measures needed on a daily basis, if any. A daily log book shall be maintained to document the dust



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

control measures implemented.

(5) The log book shall 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.

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

Condition 1-9: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 231-8

#### Item 1-9.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-9.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The Department has determined the Best Available Control Technology (BACT) for green house gas (GHG) emissions from the Hyland Landfill is compliance with the New Source Performance Standards (NSPS – Part 60 Subpart WWW) and the National Emission Standard for Hazardous Air Pollutants (NESHAP – Part 63 Subpart AAAA). GHG BACT and permit terms include:

- (1) Early implementation of the NSPS capture and control system with engines combusting the landfill gas to generate electricity and a backup open flare;
- (2) Early implementation of the NESHAP including the startup shutdown and malfunction (SSM) plan;
- (3) Extended operation of the capture and control system beyond the NSPS closure requirements of less than 50 megagrams per year. The Department requires the capture and control system to be operational until it is not practicable to extract sufficient landfill gas to operate a control device;
- (4) Permit conditions 1-10 through 1-44 reference the NSPS and NESHAP requirements to address items (1), (2) and (3) above. These conditions were written for



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

implementation of GHG BACT and are either equivalent or more restrictive than the NSPS control requirements for non-methane organic compound (NMOC) emissions;

- (5) Hyland has an existing capture and control system and, thus, some of the NSPS requirements are partially satisfied. Hyland shall submit a proposed schedule of completion for the specific requirements of the NSPS and NESHAP earlier than the regulation requirements. In addition, Hyland shall propose a closure requirement beyond the NSPS. The proposed schedule is due within 60 days of permit issuance.
- (6) Permit conditions 1-45, 1-46 and 1-48 contain operational requirements for the engines to assure proper and efficient operation as follows: (1) a limit of nitrogen oxide (NOx) and carbon monoxide (CO) emissions from the engines, (2) performance testing of the engines every 5 years, (3) routine monitoring of NOx and CO emissions based on portable analyzers, (4) a requirement to follow the existing operation and maintenance (O&M) manual for the engines, and (5) a requirement to follow the existing O&M plan for the landfill gas pre-treatment system;
- (7) Permit condition 1-49 contains operational requirements for the open flare to assure this backup device is operating properly when needed. The permit requirements include: (1) a test of the flare every 5 years to demonstrate compliance with 40CFR60.18, (2) routine monitoring, and (3) routine maintenance.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 24:** Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60, NSPS Subpart WWW

#### Expired by Mod 1

#### Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

#### Item 24.2:

Compliance Certification shall include the following monitoring:



#### New York State Department of Environmental Conservation Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

> 40CFR60 Subpart WWW - Standards of Performance for Municipal Solid Waste Landfills:

The provisions of 40CFR60 Subpart WWW apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. Hyland Facility Associates was issued a Solid Waste Management/Construction Operation Permit by the New York State Department of Environmental Conservation on May 3, 1995 for the facility located at 6653 Herdman Road, Angelica, New York. Construction of the landfill was completed between the years 1995 and 1998; thus, making the facility subject to 40CFR60 Subpart WWW.

In 2003, as part of the air permit application for operation of a candlestick flare, Hyland Facility Associates submitted an initial design capacity report that demonstrated the landfill design capacity was less than 2.5 million megagrams (Mg) or 2.5 million cubic meters. A maximum design capacity below these limits exempted Hyland Landfill from completing a Tier 1 NMOC emission rate report, installing emission controls and various additional recordkeeping and reporting requirements of 40CFR60 Subpart WWW.

On December 20, 2006, Hyland Facility Associates was issued an air permit modification for a 48-acre lateral and vertical expansion of the landfill. As a result of the permitted expansion and in accordance with the regulation, an Amended Design Capacity report and a Tier 1 Initial NMOC Emission Rate report were completed. The results of the amended design capacity report indicated the landfill increased to 10.8 million cubic meters. The Tier 1 NMOC report, completed in March, 2007, indicated the maximum estimated annual NMOC emissions would exceed the 50 Mg/yr threshold and thus, require the installation of a landfill gas collection and control system.

As allowed by regulation, since the Tier 1 test uses a default NMOC concentration in the calculations, a Tier 2 NMOC test was completed to obtain a more accurate estimate of the NMOC generation rate. The Tier 2 test obtains an actual NMOC concentration by collecting and analyzing landfill gas samples from the landfill. The actual NMOC concentration is then used in the calculations to obtain a revised NMOC landfill gas generation rate. Hyland completed a Tier 2 test on August 24, 2007 and the revised uncontrolled NMOC emission rate was estimated to be 11



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Mg/yr. Due to the addition of several vertical wells in the gas collection system in April, 2008, another Tier 2 test was completed on July 7, 2008. The revised uncontrolled NMOC emission rate was estimated to be 29 Mg/yr in the year 2008.

A summary of the remaining significant applicable requirements of 40CFR60 Subpart WWW is provided below:

Requirement: Tier 2 NMOC generation rate using

site-specific NMOC concentration Rule Citation: 40CFR60.754(a)(3) and

40CFR60.757(c)(1)

Schedule: Due annually (unless approved by the Department) until greater than 50 Mg/yr or landfill

closed

Requirement: Tier 3 using site-specific methane

generation rate constant

Rule Citation: 40CFR754(a)(4) and

40CFR757(c)(2)

Schedule: Due 180 days after the first Tier 2 exceedance of 50 Mg/yr and annually thereafter until greater than 50

Mg/yr or landfill closed

Requirement: Submit a collection and control system

design plan

Rule Citation: 40CFR60.752(b)(2)(i) and

40CFR60.757(c)

Schedule: Due 1 year after the emission rate exceeds 50

Mg/yr

Requirement: Install a collection and control

system

Rule Citation: 40CFR60.752(b)(2)(ii)

Schedule: Due within 30 months after the first Tier 2

exceedance of 50 Mg/yr.

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 7/30/2009.

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

Condition 1-10: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.752(b)(2), NSPS Subpart

www



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### Item 1-10.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-10.2:

Mod 1/Changes Only

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

As per permit, Ren 0 Mod 0, Hyland is not required to implement the collection and control requirements of the NSPS-Subpart WWW for NMOC emissions. However, as required by this permit modification, Ren 0 Mod 1, Hyland must install and operate Best Available Control Technology (BACT) for greenhouse gas (GHG) emissions. As such, Hyland is required to implement the collection and control of landfill gas emissions earlier and longer than the NSPS-Subpart WWW. Early implementation and extended operation will be accomplished in accordance with the approved plan submitted as specified in Condition 1-9.2(5) of this permit. Hyland shall complete the following:

- (i) Submit a collection and control system design plan prepared by a professional engineer to the Department in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit. The design plan shall satisfy the requirements as specified by paragraphs (A) through (J) below:
- (A) The collection and control system as described in the plan shall meet the design requirements of paragraph (ii) below;
- (B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of Conditions 1-13 through 1-40, \$60.753 through \$60.758 proposed by the owner or operator;
- (C) The collection and control system design plan shall either conform with specifications for active collection systems in Conditions 1-41 and 1-42, §60.759 or include a demonstration to the Department's satisfaction of the sufficiency of the alternative provisions to Conditions 1-41 and 1-42, §60.759;
- (D) The collection and control system design plan shall include a diagram of the collection system showing collection system positioning including all wells,



#### New York State Department of Environmental Conservation Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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;

- (E) The collection and control system design plan shall include 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;
- (F) 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;
- (G) 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;
- (H) 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;
- (I) The collection and control system design plan shall include the provisions for the control of off-site migration; and
- (J) The Department shall review the information submitted under paragraphs (i)(A) through (I) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.
- (ii) Install and operate a collection and control system that captures the gas generated within the landfill as required by paragraphs (ii)(A) and (iii) below in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.
  - (A) An active gas collection system shall:
    - (1) be designed to handle the maximum expected gas flow



#### New York State Department of Environmental Conservation Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

- (2) 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 not to exceed 5 years (if active) or not to exceed 2 years (if closed or at final grade);
  - (3) collect gas at a sufficient extraction rate;

and

- (4) be designed to minimize off-site migration of subsurface gas.
- (iii) Route all the collected gas to a control system that complies with either of the following:
- (A) is an open flare designed and operated in accordance with §60.18; or
- (B) is a control system designed and operated to reduce NMOC by 98% (by weight), unless the gas has been treated in accordance with paragraph (C) below. Hyland treats the landfill gas prior to combustion in the engines. Therefore, the engines are not required to satisfy the testing specified in this paragraph. Refer to Condition 1-11 for the gas treatment system design and operation requirements;
- (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 paragraph (iii)(A) or (B) above.
- (iv) Operate the collection and control device installed to comply with GHG-BACT in accordance with the provisions of Conditions 1-13 through 1-20 (§60.753), Conditions 1-24 through 1-28 (§60.755) and Conditions 1-29 through 1-31, (§60.756).
- (v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (A) and (B) of this section are met:
- (A) The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the Department as provided in Condition 1-32, §60.757(d); and



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

(B) The collection and control system have been operated until it is not practicable to extract sufficient landfill gas to operate a control device as approved in the plan submitted as specified in Condition 1-9.2(5) of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-11: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.752(b)(2)(iii)('C'), NSPS

**Subpart WWW** 

#### Item 1-11.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-11.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The landfill gas pre-treatment system for the stationary internal combustion engines shall be designed and operated as follows:

- (1) 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 dewatering process, and compresses the landfill gas.
- (2) Hyland Landfill shall operate the gas treatment system at all times when gas is routed to the engines for use or subsequent sale.
- (3) Hyland shall submit to the Department a monitoring plan for proper operation of the gas treatment system. The monitoring plan shall include:
  - (a) Design specifications for the filtration,



#### New York State Department of Environmental Conservation Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

de-watering, and compression systems to demonstrate conformance with the EPA's proposed 2002 and 2006 amendments to Subpart WWW regarding a treatment

system.

(b) The minimum pressure drop across the filtration system, or other monitoring parameter(s) and operating ranges that indicate proper performance of the filtration system.

(c) The minimum landfill gas temperature reduction across a chiller based de-watering system, the minimum landfill gas dew point reduction for a non-chiller-based de-watering system, or other operating parameters and operating ranges that indicate proper performance of the de-watering system. If the owner/operator requests approval to monitor temperature or dew point at a single location, such as the outlet of the chiller or de-watering system, rather than at both the inlet and outlet, the design plan must demonstrate that the proposed monitoring location and site specific maximum temperature or maximum dew point are sufficient to indicate that the dew point has been reduced by at least 20 degrees Fahrenheit, according to the treatment system definition.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: LANDFILL GAS

Parameter Monitored: TEMPERATURE CHANGE

Lower Permit Limit: 20 degrees Fahrenheit

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED

VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-12: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.752(b)(2)(iii)('C'), NSPS

#### Subpart WWW

#### Item 1-12.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-12.2:

Compliance Certification shall include the following monitoring:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

All collected landfill gas must be routed 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 Condition 1-10.2(iii)(A) or (B), §60.752(b)(2). For purposes of this rule, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of Condition 1-10.2(iii)(A) or (B), §60.752(b)(2). The owner/operator of the landfill gas treatment system must ensure compliance with these requirements. The owner/operator of a combustion device who uses or purchases treated landfill gas for fuel in a combustion device shall be exempt from further compliance with 40 CFR 60 Subpart WWW. Since the treatment option is only valid when treated landfill gas is sold or used as a fuel in a combustion device, the gas must be used as a fuel, and venting of treated landfill gas to the ambient air is not allowed under this option.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 1-13: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(a), NSPS Subpart

#### www

#### Item 1-13.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-13.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To comply with the Best Available Control Technology (BACT) criteria specified in Condition 1-10.2(ii)(A)(2), §60.752(b)(2), Hyland shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill earlier than the 5 year active or 2 year closed requirement of the NSPS §60.753(a).



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Early implementation and operation of the gas collection system will be completed in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-14: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(b), NSPS Subpart

**WWW** 

#### Item 1-14.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-14.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Operate the collection system with 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 Condition 1-34.2(1), §60.757(f);
- (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; and
- (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in Condition 1-24.2(3), §60.755(a). If corrective actions are taken as required then the



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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 square inch gauge

Monitoring Frequency: MONTHLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-15: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(c), NSPS Subpart

#### **WWW**

#### Item 1-15.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-15.2:

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 Condition 1-24.2(4), §60.755(a). If corrective actions are taken as required then 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Parameter Monitored: TEMPERATURE

Upper Permit Limit: 54.9 degrees Centigrade (or Celsius)

Monitoring Frequency: MONTHLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 1-16:** Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(c), NSPS Subpart

www

#### Item 1-16.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-16.2:

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 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.

Unless an alternative test method is established as allowed by Condition 1-10.2(i), \$60.752(b)(2), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:

- (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
- (ii) A data recorder is not required;
- (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
- (iv) A calibration error check is not required;
- (v) The allowable sample bias, zero drift, and calibration



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

drift are  $\pm 10$  percent.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in Condition 1-24.2(4), §60.755(a). If corrective actions are taken as required then 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: 4.9 percent Monitoring Frequency: MONTHLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-17: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(d), NSPS Subpart

**WWW** 

## Item 1-17.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000074-82-8 METHANE

#### Item 1-17.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: AMBIENT AIR MONITORING

Monitoring Description:

Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and 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. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in Condition 1-26.2(4), §60.755(c). If corrective actions are taken as required then 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: 499 parts per million (by volume)

Reference Test Method: Method 21 Monitoring Frequency: QUARTERLY

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-18: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.753(e), NSPS Subpart

www

#### Item 1-18.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-18.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with Condition 1-10.2(iii), §60.752(b)(2). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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

**Condition 1-19:** Compliance Certification

**Effective for entire length of Permit** 

Applicable Federal Requirement:40CFR 60.753(f), NSPS Subpart WWW

#### Item 1-19.1:

The Compliance Certification activity will be performed for the Facility.

#### Item 1-19.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Operate the control or treatment system at all times when

the collected gas is routed to the system

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 1-20:** Compliance Certification

**Effective for entire length of Permit** 

Applicable Federal Requirement: 40CFR 60.753(g), NSPS Subpart

#### www

## Item 1-20.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

If monitoring demonstrates that the operational requirements of Conditions 1-14, 1-15, 1-16 or 1-17 are not met, corrective action shall be taken as specified in Condition 1-24.2(3) and (4), §60.755(a) or Condition 1-26, §60.755(c). If corrective actions are taken as specified in Conditions 1-24 through 1-28, §60.755, the monitored exceedance is not a violation of the operational requirements in this section.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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

Condition 1-21: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.754, NSPS Subpart WWW

#### Item 1-21.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-21.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) Hyland Landfill is required to monitor the actual annual waste acceptance rate. If the actual annual waste acceptance rate exceeds 465,000 tons, then the facility shall input the actual rate into the Landfill Gas Emissions Model (LandGEM) or similar model and re-evaluate the emissions from the landfill and engine plant.
- (2) For the purposes of determining waste acceptance rates, any material that has the potential to contribute to the landfill gas production rate shall be included in the total calculation. These materials shall include, but are not limited to: municipal solid waste, industrial waste, construction and demolition debris, contaminated soil, sewage treatment plant sludge, tire waste, and beneficial use determination (BUD) material that has the potential to contribute to the landfill gas production rate. Inert materials including ash and asbestos may be excluded from the annual waste acceptance rate calculation. 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.
- (3) The actual annual waste acceptance rate is being monitored because it is a measurable variable used in estimating the landfill gas emissions. During review of the project, a maximum annual waste acceptance rate of 465,000 tons was used in the emission calculations. The corresponding emission estimates were used to determine the applicability or non-applicability of New Source Review -NSR (6NYCRR Part 231-5), and Prevention of Significant Deterioration PSD (6NYCRR Part 231-7).



(4) Hyland Landfill shall maintain records to document the actual waste received per delivery. The actual annual waste 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 annual waste acceptance rate exceeds 465,000 tons, then a report of the emission results and findings shall be provided to the Department within 30 days of the recorded waste increase. The report shall include a determination of the applicability or non-applicability of the NSR and PSD regulations.

Monitoring Frequency: PER DELIVERY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

#### **Condition 25:** Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

Applicable Federal Requirement:40CFR 60.754, NSPS Subpart WWW

## Expired by Mod 1

## Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

#### Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- 1. Hyland Landfill shall maintain records to document the actual waste received per delivery. The actual annual waste 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.
- 2. If the actual annual waste acceptance rate exceeds 374,400 tons, the facility shall input the actual rate into Landfill Gas Emissions Model (LandGEM) and re-evaluate the NMOC emissions from the landfill. A report of the LandGEM results and findings shall be provided to the Department within 30 days of the recorded waste increase.



3. The actual annual waste acceptance rate is being monitored because it is a measurable variable used in estimating the landfill gas emissions. During review of the project, a maximum annual waste acceptance rate of 374,400 tons was used in the emission calculations. The corresponding emission estimates were used to determine the applicability or non-applicability of the following regulations: federal New Source Performance Standards (NSPS) for new MSW landfills (40 CFR 60 Subpart WWW), the National Emission Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills (40 CFR Subpart AAAA), New Source Review (6NYCRR Part 231-2), and Prevention of Significant Deterioration (40CFR52.21). As such, if the annual waste acceptance rate exceeds 374,400 tons then the applicability or non-applicability of these regulations will need to be re-evaluated.

- 4. The annual waste acceptance rate of 374,400 tons was determined based on the permitted rates identified in the Solid Waste permit. The Solid Waste Permit for Hyland Landfill limits the annual waste receipts to 312,000 tons. In addition, the Solid Waste permit allows Hyland Landfill to accept alternate daily cover (ADC) at a rate equal to 20 percent of the waste acceptance rate, or 62,400 tons. The total annual waste acceptance rates used in the LandGEM air emission estimates was based on the sum of the annual waste receipts (312,000 tons) and 20% ADC (62,400 tons) for a total amount of 374,400 tons per year.
- 5. 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.
- 6. The waste design capacity used in the LandGEM air emission estimates was 8,682,179 Mg.

Monitoring Frequency: PER DELIVERY Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

Mod 1/Changes Only

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

**Condition 1-22:** Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.754(b), NSPS Subpart

**WWW** 

#### Item 1-22.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-22.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In accordance with the Best Available Control Technology (BACT) criteria, the collection and control system can be removed as provided in Condition 1-10.2(v), §60.752(b)(2), and in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-23: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.754(d), NSPS Subpart

www

#### Item 1-23.1:

The Compliance Certification activity will be performed for the facility: The Compliance Certification applies to:

Emission Unit: 1-LFGTE

Emission Unit: 1-LNDFL

Regulated Contaminant(s):

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

## Item 1-23.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Hyland is not required to complete the performance



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

testing specified in this subpart as required by  $\S60.752(b)(2)(iii)(B)$ .

Hyland is required to comply with Condition 1-10.2(iii)(A) for the open flare and Condition 1-10.2(iii)(C) and Condition 1-11 for the gas treatment system. If Hyland changes the current control options, then applicability of this performance test requirement shall be evaluated.

Parameter Monitored: NMOC - LANDFILL USE ONLY Upper Permit Limit: 98 percent reduction by weight Reference Test Method: EPA Method 25C or Method 18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 1-24: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.755(a), NSPS Subpart

**WWW** 

#### Item 1-24.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Except as provided in §60.752(b)(2)(i)(B), the specified methods in paragraphs (1) through (5) below, shall be used to determine whether the gas collection system is in compliance with Condition 1-10.2(ii), §60.752(b)(2).

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.752(b)(2)(ii)(A)(1) and for waste sites with known year-to-year solid waste acceptance rate, the most recent version of LandGEM or other approved method shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emissions Factors (AP-42) or other site specific values demonstrated to be appropriate for this site and approved by the Department. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.



- (2) For the purposes of determining sufficient density of gas collectors for compliance with Condition 1-10.2(ii)(A)(2), Hyland 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 Condition 1-10.2(ii)(A)(3), §60.752(b)(2), Hyland 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 5 calendar days, except for the three conditions allowed under Condition 1-14, §60.753(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 alternate timeline for correcting the exceedance may be submitted to the Administrator for approval.
- (4) For the purpose of identifying whether excess air infiltration into the landfill is occurring, Hyland shall monitor each well monthly for temperature and oxygen as provided in Condition 1-15 and 1-16, §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 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 Administrator for approval.
- (5) An owner or operator seeking to demonstrate compliance with \$60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in \$60.759 shall provide information satisfactory to the Department as specified in \$60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### **DESCRIPTION**

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-25: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.755(b), NSPS Subpart

**WWW** 

## Item 1-25.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Hyland shall place each well or design component as specified in the approved design plan as provided in Condition 1-10.2(i), §60.752(b)(2). Each well shall be installed earlier than the 5 year active or 2 year closed requirement of Condition 1-13, §60.753(a).

Early implementation and operation of the gas collection system will be completed in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-26: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.755(c), NSPS Subpart

www

#### Item 1-26.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

Item 1-26.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The following procedures shall be used for compliance with the surface methane operational standard as provided in Condition 1-17, §60.753(d).

- (1) Hyland 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 Condition 1-27, §60.755(d). The first surface monitoring quarter shall begin in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.
- (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 8.3.1 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 paragraphs (4)(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 Condition 1-17, §60.753(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

Mod 1/Changes Only



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

location, the action specified in paragraph (4)(v) below shall be taken, and no further monitoring of that location is required until the action specified in paragraph (4)(v) 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 paragraph (4)(ii) or (iii) above shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring 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 remonitoring shows an exceedance, the actions specified in paragraph (4)(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) Hyland shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-27: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.755(d), NSPS Subpart

#### **WWW**

#### Item 1-27.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

To comply with the provisions in Condition 1-26, §60.755(c) of this section, Hyland 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 6 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 sample, collection, preservation, storage and transport requirements in Section 8.0 of Method 21 of 40 CFR Part 60 Appendix A, the instrument evaluation procedures of section 8.1 of Method 21 shall be used.
- (4) The calibration procedures provided in section 10 of Method 21 of 40 CFR Part 60 Appendix A of this part shall be followed immediately before commencing a surface monitoring survey.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-28: Compliance Provisions - Start-up, shutdown, or malfunction Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.755(e), NSPS Subpart

www

#### Item 1-28.1:

The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of 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 1-29: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.756(a), NSPS Subpart

**WWW** 

## Item 1-29.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To comply with Condition 1-10.2(ii)(A), §60.752(b)(2), for an active gas collection system, Hyland shall install a sampling port and a thermometer, or 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 on a monthly basis as provided in Condition 1-24.2(3), §60.755(a); and
- (2) Monitor oxygen concentration in the landfill gas on a monthly basis as provided in Condition 1-24.2(4), §60.755(a); and
- (3) Monitor temperature of the landfill gas on a monthly basis as provided in Condition 1-24.2(4), §60.755(a).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-30: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.756(c), NSPS Subpart

## **WWW**

#### Item 1-30.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To comply with Condition 1-10.2(iii), \$60.752(b)(2), using an open flare, Hyland shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
- (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
- (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
- (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-31: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.756(f), NSPS Subpart WWW

#### Item 1-31.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000074-82-8 METHANE

#### Item 1-31.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: AMBIENT AIR MONITORING Monitoring Description:

To demonstrate compliance with Condition 1-26, \$60.755(c), Hyland shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in Condition 1-27, \$60.755(d). 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

frequency for that landfill to quarterly monitoring.

Parameter Monitored: METHANE

Upper Permit Limit: 499 parts per million (by volume) above background measurements

Reference Test Method: EPA Method 21

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-32: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.757(d), NSPS Subpart

www

#### Item 1-32.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Hyland shall submit a closure report to the Department within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 6NYCRR Part 360-2.

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-33: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.757(e), NSPS Subpart

www

#### Item 1-33.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

> CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) Whether active or final closed, Hyland shall submit an equipment removal report to the Department 30 days prior to removal or cessation of operation of the control equipment.
- (2) The equipment removal report shall demonstrate the need to remove equipment due to the reduction in landfill gas generation rate. In addition, the report must address the control of greenhouse gas emissions as related to the Best Available Control Technology criteria of extending operation of the collection and control system beyond the NSPS requirements.
- (3) The Department may request such additional information as may be necessary to verify that all of the conditions for removal in Condition 1-10.2(v) have been met in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING **DESCRIPTION** 

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-34: **Compliance Certification Effective for entire length of Permit** 

Applicable Federal Requirement:40CFR 60.757(f), NSPS Subpart WWW

#### Item 1-34.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

> Hyland is complying with Best Available Control Technology for greenhouse gas emissions using an active collection system designed in accordance with Condition 1-10.2(ii), 60.752(b)(2). The reporting requirements to



document compliance with the operation of the active collection system, as specified in the NSPS (40CFR60.757(f)), requires an annual report of the information in paragraphs (1) through (6) below. However, the NESHAP (40CFR63.1980(a)) requires a semi-annual report containing the same information. As such, for consistency, Hyland shall submit to the Department semi-annual reports of the recorded information in paragraphs (1) through (6) below. The initial semi-annual report shall be submitted in accordance with the timeframes of the approved schedule referenced in Condition 1-9.2(5) of this permit.

- (1) Value and length of time for exceedance of applicable parameters monitored under Condition 1-29, §60.756(a) and Condition 1-30, §60.756(c).
- (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 Condition 1-30.2(2)(ii), §60.756(c).
- (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. In addition, during an engine plant shutdown, Hyland is required to activate the open flare following Hyland's notification and activation procedures approved by the Department on April 4, 2011. In accordance with these procedures, the open flare shall be operational within one hour of the engine plant shutting down.
- (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 Condition 1-17, §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 Condition 1-24.2(3), §60.755(a), Condition 1-25, §60.755(b), and Condition 1-26.2(4), §60.755(c).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

**Condition 1-35:** Compliance Certification

**Effective for entire length of Permit** 

Applicable Federal Requirement: 40CFR 60.757(g), NSPS Subpart

**WWW** 

#### Item 1-35.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Hyland is required to operate the open landfill gas flare in compliance with §60.18. The initial performance test required under §60.8 was completed on December 28, 2005. The Department requires the flare to be tested every five (5) years. The flare was tested again on August 24, 2010 and is scheduled to be re-tested by December 31, 2015.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-36: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.758(a), NSPS Subpart

www

#### Item 1-36.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Except as provided in Condition 1-10.2(i)(B), §60.752(b)(2), Hyland shall keep for at least 5 years

Air Pollution Control Permit Conditions
Mod 1/Changes Only
Page 46
DRAFT



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

> up-to-date, readily accessible, on-site records of the maximum design capacity report, 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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period.

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

Condition 1-37: **Compliance Certification Effective for entire length of Permit** 

Applicable Federal Requirement: 40CFR 60.758(b), NSPS Subpart

**WWW** 

#### Item 1-37.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

> Except as provided in Condition 1-10.2(i)(B), §60.752(b)(2), Hyland shall keep up-to-date, readily accessible records for the life of the control equipment, the data listed below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

- (1) To demonstrate compliance with Condition 1-10.2(ii), §60.752(b)(2):
- (i) The maximum expected gas generation flow rate as calculated in Condition 1-24.2(1), §60.755(a). Another method to determine the maximum gas generation flow rate may be used, 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 Condition 1-41.2(1), §60.759(a).



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

(2) To demonstrate compliance with Condition 1.10.2(iii)(A), §60.752(b)(2) 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 §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 1-38: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.758(c), NSPS Subpart

www

#### Item 1-38.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) Except as provided in Condition 1-10.2(i)(B), \$60.752(b)(2), Hyland shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Conditions 1-29, 1-30 and 1-31, \$60.756, 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) Hyland 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 Condition 1-30, §60.756(c).



(3) To comply by use of an open flare, Hyland shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under Condition 1-30, \$60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

Condition 1-39: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.758(d), NSPS Subpart

www

#### Item 1-39.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Except as provided in Condition 1-10.2(i)(B), §60.752(b)(2), Hyland 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) Hyland shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under Condition 1-25, §60.755(b).
- (2) Hyland 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 Condition 1-41.2(3)(i), \$60.759(a), as well as any nonproductive areas excluded from collection as provided in Condition 1-41.2(3)(ii), \$60.759(a).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

#### **DESCRIPTION**

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 6 calendar month(s).

**Condition 1-40:** Compliance Certification

**Effective for entire length of Permit** 

Applicable Federal Requirement: 40CFR 60.758(e), NSPS Subpart

**WWW** 

#### Item 1-40.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as provided in Condition 1-10.2(i)(B), \$60.752(b)(2), Hyland shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in Conditions 1-14 through 1-20, \$60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-41: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.759(a), NSPS Subpart

**WWW** 

#### Item 1-41.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-41.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

As per permit, Ren 0 Mod 0, Hyland is not required to implement the collection and control requirements of the NSPS-Subpart WWW for NMOC emissions. However, as required by this permit modification, Ren 0 Mod 1, Hyland must install and operate Best Available Control Technology (BACT) for greenhouse gas (GHG) emissions. As such, Hyland is required to implement the collection and control of landfill gas emissions as required under Condition 1-10.2(i), §60.752(b)(2).

Hyland 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 Department as provided in Condition 1-10(i)(C) and (J), §60.752(b)(2):

- (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 expandability, 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) above 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) above shall control all gas producing areas, except as provided by paragraphs (3)(i) and (3)(ii) below.
- (i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under Condition 1-39, §60.758(d). 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

be excluded from control, upon demonstration that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of GHG emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Department upon request. A separate GHG emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the GHG emissions estimate for the entire landfill. Emissions from each section shall be computed using LandGEM or other approved method.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 1-42: Compliance Certification Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.759(b), NSPS Subpart

www

#### Item 1-42.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

#### Item 1-42.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To comply with Condition 1-10.2(i)(A), §60.752(b)(2), Hyland 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 1-43: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.759(c), NSPS Subpart

## $\mathbf{W}\mathbf{W}\mathbf{W}$

#### Item 1-43.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

## Item 1-43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To comply with Condition 1-10.2(i)(A), §60.752(b)(2), Hyland shall convey the landfill gas to a control system in compliance with Condition 1-10.2(iii), §60.752(b)(2),



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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) below shall be used.
- (2) For new collection systems, the maximum flow rate shall be in accordance with Condition 1-24.2(1), §60.755(a).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period.

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

Condition 27: Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 63.1945, Subpart AAAA

## Expired by Mod 1

## Item 27.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

## Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

In accordance with the criteria specified in §63.1935(a)(3), Hyland Landfill is an existing affected source. Hyland Landfill is not a major source of hazardous air pollutants (HAPs) and is considered an area source. As such, in accordance with §63.1945(f), Hyland Facility Associates must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date the landfill is required to install a collection and control system required 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 the landfill or by January 16, 2004, whichever occurs later.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

## DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 7/30/2009. Subsequent reports are due every 6 calendar month(s).

Condition 1-44: **Compliance Certification Effective for entire length of Permit** 

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

## Item 1-44.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

#### Item 1-44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

> Hyland is required to install a collection and control system and 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 in accordance with the approved schedule and must comply with all of the provisions as listed in §63.6(e)(3).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period.

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

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

**Condition 29: Process Definition By Emission Unit** Effective between the dates of 02/25/2009 and Permit Expiration Date



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

## Applicable Federal Requirement: 6 NYCRR Subpart 201-6

#### **Item 29.1(From Mod 1):**

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

Emission Unit: 1-LFGTE

Process: ENG Source Classification Code: 2-01-008-02

**Process Description:** 

Process ENG consists of three (3) caterpillar Engines in the LFGTE Plant. Each engine will consume landfill gas at

approximately 460 cubic feet per minute.

Emission Source/Control: 01ENG - Combustion

Design Capacity: 1,600 kilowatts

Emission Source/Control: 02ENG - Combustion

Design Capacity: 1,600 kilowatts

Emission Source/Control: 03ENG - Combustion

Design Capacity: 1,600 kilowatts

#### **Item 29.2(From Mod 1):**

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

Emission Unit: 1-LNDFL

Process: FLR Source Classification Code: 5-02-006-01

Process Description:

Emission Unit 1-LNDFL, Process FLR includes the installation, operation and monitoring of the John Zink

Company flare or similar.

Emission Source/Control: FLR02 - Control

Control Type: FLARING

Emission Source/Control: MSWLF - Process

#### **Item 29.3(From Mod 1):**

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

Emission Unit: 1-LNDFL

Process: FUG Source Classification Code: 5-02-006-02

Process Description:

Emission Unit 1-LNDFL, Process FUG includes the management and monitoring of the uncontrolled, fugitive

landfill gas emissions from the entire landfill.

Emission Source/Control: MSWLF - Process

**Condition 30:** Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

## **Applicable Federal Requirement:**

## **Expired by Mod 1**

#### Item 30.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN CAS No: 000630-08-0 CARBON MONOXIDE

#### Item 30.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

- 1.) Nitrogen oxides (NOx) and carbon monoxide (CO) stack emissions from each internal combustion engine shall be analyzed on a routine basis using a portable combustion analyzer. This periodic monitoring is being used to confirm the engines consistently operate within the permitted levels. 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.
- 2.) Portable Combustion Analyzer The suitability of the portable analyzer shall be approved by the Department. The preferred method for analyzing NOx 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, a sampling method shall be followed 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 periodic monitoring shall begin within 90 days following completion of the initial performance test. 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	
% of permitted	Monitoring
emission	
rate	Frequency
50% or less	quarterly
51 - 75%	monthly
76 - 80%	every 2 weeks
81 - 95%	weekly
96% - 100%	daily

- 5.) Methods The permitted emission rates of 0.6 g/bhp-hr NOx and 3.0 g/bhp-hr CO shall be converted from g/bhp-hr to ppm following Equation 1 and 2 in 40CFR60.4244. The equations shall be based on the stack gas volumetric flow rate and brake work of the engine obtained during the most recent performance test or other acceptable method.
- 6.) Recordkeeping Records shall be maintained to include: (1) date and time of the portable analyzer measurement, (2) a log of the NOx and CO measurements in ppm, (3) comparison of the NOx and CO portable analyzer measurements to the permitted emission rates that have been converted to ppm, 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.
- 7.) Reporting If an exceedance of the permitted emission rates is documented during the periodic monitoring, the facility shall evaluate the engine performance and proper operation of the analyzer. The results shall be reported to the Department within 30 calendar days along with a proposed program for correction, and a schedule for compliance.

Parameter Monitored: CARBON MONOXIDE



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Upper Permit Limit: 3.0 grams per brake horsepower-hour Reference Test Method: Portable analyzer for CO and NOx

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD - SEE MONITORING

**DESCRIPTION** 

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

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

**Condition 31: Compliance Certification** 

Effective between the dates of 02/25/2009 and Permit Expiration Date

## **Applicable Federal Requirement:**

## Expired by Mod 1

## Item 31.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN CAS No: 000630-08-0 CARBON MONOXIDE

#### Item 31.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

- 1.) A performance test to demonstrate compliance with the permitted emission rates of 0.6 grams per brake horsepower-hour (g/bhp-hr) nitrogen oxides (NOx) and 3.0 g/bhp-hr carbon monoxide (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 conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- 3.) The methods used to measure NOx 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 3.0 grams per brake horsepower-hour

Reference Test Method: EPA Method 10 for CO and Method 7 or 7E for NOx Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

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

Condition 1-45: Capping Monitoring Condition Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

## Item 1-45.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the



Facility DEC 1D: 9025200005

purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 231-6 6 NYCRR Subpart 231-8

#### Item 1-45.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 1-45.3:

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.

#### Item 1-45.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 1-45.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

## Item 1-45.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

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

#### Item 1-45.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- (1) A performance test to demonstrate compliance with the permitted emission rates of 0.6 grams per brake horsepower-hour (g/bhp-hr) nitrogen oxides (NOx) must be completed as specified below.
- (2) The performance test shall be conducted on one of each similar engine type at the facility. The specific



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

engine to be tested will be selected by the Department. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.

- (3) The methods used to measure NOx shall include EPA Methods 7 or 7E 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 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. The first performance test was completed on January 8, 2009. The next performance test is scheduled to be completed by December 31, 2013.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.6 grams per brake horsepower-hour

Reference Test Method: EPA Method 7 or 7E

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

## Condition 1-46: Capping Monitoring Condition Effective for entire length of Permit

## Applicable Federal Requirement: 6 NYCRR Subpart 201-7

#### Item 1-46.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 231-6 6 NYCRR Subpart 231-8

#### Item 1-46.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 1-46.3:



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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.

#### Item 1-46.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 1-46.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 1-46.6:

The Compliance Certification activity will be performed for:

**Emission Unit: 1-LFGTE** 

Regulated Contaminant(s):

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

## Item 1-46.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- (1) A performance test to demonstrate compliance with the permitted emission rate of 3.0 grams per brake horsepower-hour (g/bhp-hr) carbon monoxide (CO) must be completed as specified below.
- (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 conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- (3) The methods used to measure CO shall include 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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

representative may be present during the test.

(5) 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. The first performance test was completed on January 8, 2009. The next performance test is scheduled to be completed by December 31, 2013.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 3.0 grams per brake horsepower-hour

Reference Test Method: EPA Method 10 for CO

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 32:** Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

### **Applicable Federal Requirement:**

### Expired by Mod 1

### Item 32.1:

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 32.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

- 1.) Due to the previous odor nuisance caused by landfill gas emissions, the NMOC in the landfill gas has been assigned an Environmental Rating of 'A'. This shall require the capture of landfill gas to the best extent practical and the destruction of at least 98% of the NMOC in the collected gas or the installation of Best Available Control Technology (BACT).
- 2.) Hyland Facility Associates shall operate a landfill gas pre-treatment system to remove and reduce certain contaminants from the gas stream prior to combustion in



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

the internal combustion engines. Operation of the gas pre-treatment system followed by combustion of the treated landfill gas in the internal combustion engines is expected to result in a 98% reduction of NMOC or may be considered BACT.

- 3.) 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.
- Within 180 days of issuance of this permit, Hyland shall submit to the Department for approval an Operation and Maintenance (O&M) plan to outline proper operation and maintenance procedures of the pre-treatment system. The plan shall include, but is not limited to: (1) the minimum pressure drop across the filtration system, or other monitoring parameter(s) and operating ranges that indicate proper performance of the filtration system, (2) the minimum landfill gas temperature reduction across a chiller-based de-watering system, or the minimum landfill gas dew point reduction for a non-chiller-based de-watering system, or other operating parameter(s) and operating ranges that indicate proper performance of the de-watering system, (3) a maintenance schedule, (4) recordkeeping format and reporting frequency, and (5) demonstration of satisfying the design specifications of the filtering, dewatering and compression requirements of item (a) above.
- c.) Hyland shall operate the gas treatment system at all times when gas is routed to the engines for use or subsequent sale. Hyland shall maintain a log documenting the description and duration of all periods when the gas treatment system or engines were not operating for a period exceeding 2 hours and report such instances to the Region 9 Division of Air Resources within 2 business days. 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.
- 4.) Records shall be kept on site and be made available to the Department upon request.

Parameter Monitored: NMOC - LANDFILL USE ONLY



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Lower Permit Limit: 98 percent reduction

Reference Test Method: Satisfactory operation of gas pretreatment Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD - SEE MONITORING

**DESCRIPTION** 

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

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

**Condition 33: Compliance Certification** 

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Replaced by Condition(s) 1-47

### Item 33.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

### Item 33.2:

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.
- 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 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 or not.
   Condensing water vapor is not considered visible emissions.
- d.) If visible emissions 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 the corrective actions do not eliminate visible emissions, 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, Hyland 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: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

Condition 1-47: Compliance Certification Effective for entire length of Permit

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

Replaces Condition(s) 33

### Item 1-47.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

#### Item 1-47.2:

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.
- (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 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 or not. Condensing water vapor is not considered visible emissions.
- (d) If visible emissions 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 the corrective actions do not eliminate visible emissions, 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) Hyland submitted an Operation and Maintenance (O&M) plan for the engines on February 12, 2009. In addition, an O&M Plan for the landfill gas pre-treatment system was submitted in March, 2009. The O&M plans shall be followed to minimize emission from the engines.
- (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: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 1-48: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 231-6

### Item 1-48.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LFGTE

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN CAS No: 000630-08-0 CARBON MONOXIDE



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

### Item 1-48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) Nitrogen oxides (NOx) and carbon monoxide (CO) stack emissions from each internal combustion engine shall be analyzed on a routine basis using a portable combustion analyzer. This periodic monitoring is being used to confirm the engines consistently operate within the permitted levels. 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.
- (2) Portable Combustion Analyzer The suitability of the portable analyzer shall be approved by the Department. The preferred method for analyzing NOx 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, a sampling method shall be followed 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 periodic monitoring shall begin within 90 days following completion of the initial performance test. 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 % of permitted emission

Monitoring



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

rate	Frequency
50% or less	quarterly
51 - 75%	monthly
76 - 80%	every 2 weeks
81 - 95%	weekly
96% - 100%	daily

- (5) Methods The permitted emission rates of 0.6 g/bhp-hr NOx and 3.0 g/bhp-hr CO shall be converted from g/bhp-hr to ppm following Equation 1 and 2 in 40CFR60.4244. The equations shall be based on the stack gas volumetric flow rate and brake work of the engine obtained during the most recent performance test or other acceptable method.
- (6) Recordkeeping Records shall be maintained to include: (1) date and time of the portable analyzer measurement, (2) a log of the NOx and CO measurements in ppm, (3) comparison of the NOx and CO portable analyzer measurements to the permitted emission rates that have been converted to ppm, 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.
- (7) Reporting If an exceedance of the permitted emission rates is documented during the periodic monitoring, the facility shall evaluate the engine performance and proper operation of the analyzer. The results shall be reported to the Department within 30 calendar days along with a proposed program for correction, and a schedule for compliance.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 34:** Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable Federal Requirement:** 

Expired by Mod 1

Item 34.1:

Mod 1/Changes Only



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

The Compliance Certification activity will be performed for:

Emission Unit: 1-LNDFL

Process: FLR

Regulated Contaminant(s):

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

#### Item 34.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

- 1.) Due to the previous odor nuisance caused by landfill gas emissions, the NMOC in the landfill gas has been assigned an Environmental Rating of 'A'. This shall require the capture of landfill gas to the best extent practical and the destruction of at least 98% of the NMOC in the collected gas or the installation of Best Available Control Technology (BACT).
- 2.) Hyland Facility Associates shall operate a landfill gas flare to reduce and destruct NMOC emissions from the collected landfill gas. The flare shall be operated in accordance with the federal New Source Performance Standards established for open flares identified as 40CFR60.18 and summarized below:
- a.) 40CFR60.18(c)(1) The flare shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- b.) 40CFR60.18(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.) 40CFR60.18(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.) 40CFR60.18(c)(4)(i) The flare shall be designed for and operated with an exit velocity less than 60 ft/sec.
- e.) 40CFR60.18(c)(4)(iii) The flare is allowed to be operated with an exit velocity less than the velocity, Vmax, and less than 400 ft/sec as determined by the methods specified in 40CFR60.18(f)(4) and (f)(5).
- 40CFR60.18(d) Monitor the flare to ensure it is



operated and maintained in conformance with the design;

- g.) 40CFR60.18(e) The flare shall be operated at all times when emissions may be vented to it.
- 3.) Routine demonstrations of compliance with 40CFR60.18 for each new flare must be tested within 60 days after installation and each existing flare must be tested every five (5) years. The existing LFG Specialties flare was originally tested on December 28, 2005 and shall be retested no later than December 31, 2010. For each compliance demonstration, a 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.
- 4.) On going compliance monitoring and operation of the landfill gas flare system shall include continuous monitoring of the flare temperature and gas flow rate. Hyland shall document the flare temperature and gas flow rate using circular charts or other similar records.
- 5.) Hyland shall maintain a log documenting the description and duration of all periods when the flare was not operating for a period exceeding 2 hours and report such instances to the Region 9 Division of Air Resources within 2 business days. 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 and the flare temperature and gas flow rate data shall be kept on site and be made available to the Department upon request.

Parameter Monitored: NMOC - LANDFILL USE ONLY

Lower Permit Limit: 98 percent reduction Reference Test Method: EPA 40CFR60.18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2009.

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

### **Condition 1-49: Compliance Certification**



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

### Effective for entire length of Permit

### Applicable Federal Requirement: 40CFR 60.756(c), NSPS Subpart

### www

#### Item 1-49.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LNDFL

Process: FLR

Regulated Contaminant(s):

CAS No: 000074-82-8 METHANE

#### Item 1-49.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- (1) The landfill gas flare system shall be operated in accordance with the federal New Source Performance Standards established for open flares (40CFR60.18) as summarized below:
- (a) 40CFR60.18(c)(1) The flare shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (b) 40CFR60.18(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) 40CFR60.18(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) 40CFR60.18(c)(4)(i) The flare shall be designed for and operated with an exit velocity less than 60 ft/sec.
- (e) 40CFR60.18(c)(4)(iii) The flare is allowed to be operated with an exit velocity less than the velocity, Vmax, and less than 400 ft/sec as determined by the methods specified in 40CFR60.18(f)(4) and (f)(5).
- (f) 40CFR60.18(d) Monitor the flare to ensure it is operated and maintained in conformance with the design;
- (g) 40CFR60.18(e) The flare shall be operated at all times when emissions may be vented to it.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

- (h) 40CFR60.754(e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).
- (2) Routine demonstrations of compliance with 40CFR60.18 for each new flare must be tested within 60 days after installation and each existing flare must be tested every five (5) years. The existing LFG Specialties flare was tested on August 24, 2010 and shall be retested no later than December 31, 2015. For each compliance demonstration, a 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) On going compliance monitoring and maintenance of the landfill gas flare system shall include the following:

### Flare Monitoring:

- (a) Documentation of the flare operation shall be completed by continuously monitoring the flare temperature and gas flow rate using the chart recorder.
- (b) If the flare is operated for less than 24 hours, the chart recorder must be run for a minimum of 24 hours so the entire scale is printed on the chart.

### Flare Maintenance Testing:

- (a) The flare shall be operated approximately every two (2) weeks to remove condensate in the line and ensure the flare is operational.
- (b) During this testing, the flare shall be operated for approximately 15 to 30 minutes until an optimal operating temperature of greater than 1,200 degrees Fahrenheit is reached.
- (c) Manually record the gas flow rate and flare temperature at the end of the testing period in the flare operating log.

Regular Scheduled Flare Maintenance:

(a) Hyland shall complete regular scheduled



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

maintenance activities on the flare as per the manufacturer specifications.

- (b) If the flare or associated equipment (including but not limited to the flame arrester, automatic igniter system, gas blower, starters, controllers, filters, meters, valves, and recorder) are not operational during an engine plant shut down due to lack of maintenance or neglect, this event shall not be excused and shall be considered a violation of the permit.
- (4) Records of each certification, flare temperature and gas flow rate data, and maintenance activities shall be kept on site for a period of 5 years and be made available to the Department upon request.

Reference Test Method: EPA 40CFR60.18

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

### Condition 35: Compliance Certification

Effective between the dates of 02/25/2009 and Permit Expiration Date

### **Applicable Federal Requirement:**

### Expired by Mod 1

### Item 35.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-LNDFL

Process: FUG

Regulated Contaminant(s):

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

#### Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- 1.) Due to the previous odor nuisance caused by landfill gas emissions, the NMOC in the landfill gas has been assigned an Environmental Rating of 'A'. This shall require the capture of landfill gas to the best extent practical and the destruction of at least 98% of the NMOC in the collected gas or the installation of Best Available Control Technology (BACT).
- 2.) Hyland Facility Associates shall operate an active gas collection system to limit fugitive emissions and



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

control emissions from the landfill. On going compliance monitoring and operation of the active gas collection system shall be monitored as follows:

- a.) Hyland shall monitor the well field using a Landtec GEM 2000 or similar instrument to balance the well field on a monthly basis.
- b.) Hyland shall operate each interior wellhead in the gas collection system with a landfill gas temperature less than 55 degrees Celsius and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent.
- c.) Hyland may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated temperature does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- d.) Hyland shall operate the collection system with negative pressure at each wellhead except when there is a fire or increased well temperature; use of a geomembrane or synthetic cover; or a decommissioned well.
- 3.) Hyland Facility Associates shall document the monthly measurements, well field adjustments and repair. The records shall be kept on-site and be made available to the Department upon request.
- 4.) If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance can not be achieved within 15 calendar days of the first measurement, then the facility shall notify the Department within two business days. Hyland shall provide a written report of the results within 30 calendar days of observing the first exceedance along with a proposed program for correction and a schedule for compliance.

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 7/30/2009.

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

# 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 36:** Contaminant List

Effective between the dates of 02/25/2009 and Permit Expiration Date

Applicable State Requirement: ECL 19-0301

### Item 36.1:

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

CAS No: 000074-82-8 Name: METHANE



CAS No: 000630-08-0

Name: CARBON MONOXIDE

CAS No: 0NY075-00-0 Name: PARTICULATES

CAS No: 0NY075-00-5

Name: PM-10

CAS No: 0NY100-00-0

Name: HAP

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY750-00-0

Name: CARBON DIOXIDE EQUIVALENTS

CAS No: 0NY998-20-0

Name: NMOC - LANDFILL USE ONLY

Condition 37: Unavoidable noncompliance and violations

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable State Requirement:** 

Replaced by Condition(s) 1-50

### Item 37.1:

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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 1-50: Unavoidable noncompliance and violations Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR 201-1.4

### Replaces Condition(s) 37

### Item 1-50.1:

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

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 38: Air pollution prohibited

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable State Requirement:** 

### Expired by Mod 1

### Item 38.1:

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.

Condition 1-51: Visible Emissions Limited
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR 211.2

#### Item 1-51.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

**Condition 39: Compliance Demonstration** 

Effective between the dates of 02/25/2009 and Permit Expiration Date

### **Applicable State Requirement:**

### **Expired by Mod 1**

### Item 39.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

### Item 39.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

- 1. To address potential concerns related to fine particulate matter, Hyland Landfill shall implement a dust control plan as specified in the Facility Operation and Maintenance Manual submitted as part of the Solid Waste permit application.
- 2. Dust control procedures include proper maintenance of vegetated areas and gravel service roads. This maintenance includes routine inspections of vegetated areas and the reseeding of areas where vegetative growth is not well established. Paved surfaces are to be cleaned as required to control accumulated dust. Dust is to be controlled on the facility access roads by the application of gravel as needed and by routine watering.
- 3. A cattle guard and rumble strip have been provided on the access road to aid in removal of soil from the tires of vehicles leaving the facility. These are to be cleaned regularly. In addition, the access road is to be swept on an as-needed basis.
- 4. The landfill operator shall assess the appropriate dust control measures needed on a daily basis, if any. A daily log book shall be maintained to document the dust control measures implemented.
- 5. The log book shall 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 7/30/2009.

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



Permit ID: 9-0232-00003/00012 Facility DEC ID: 9023200003

**Condition 40: Compliance Demonstration** 

Effective between the dates of 02/25/2009 and Permit Expiration Date

**Applicable State Requirement:** 

### Expired by Mod 1

#### Item 40.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

#### Item 40.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

In the event landfill gas odors are determined by the Department to be causing a nuisance to the nearby residential community, Hyland shall undertake a program of assessment and remediation. The program may include completing one or both of the following activities as required by the Department: (1) surface monitoring of the landfill for methane emissions, and/or (2) ambient air monitoring of hydrogen sulfide emissions. Specific details describing each activity are provided below.

### SURFACE MONITORING FOR METHANE EMISSIONS

- 1. Within two (2) days of notification by the Department, Hyland shall conduct surface testing at the surface of the landfill 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. The Department must be notified as soon as practical prior to the scheduled test date so a Department representative may be present during the test.
- 2. Surface emission monitoring shall be performed in accordance with 40CFR60, section 4.3.1 of Method 21 of 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 using an organic vapor analyzer, flame ionization detector, or other portable monitor.
- 3. The portable analyzer shall meet the instrument specifications provided in section 6 of Method 21 of 40



CFR Part 60 Appendix A, except that "methane" shall replace all references to VOC. The calibration gas shall be methane, diluted to a nominal concentration of 50 parts per million in air. The calibration procedures provided in section 10 of Method 21 of 40 CFR Part 60 Appendix A of this part shall be followed immediately before commencing a surface monitoring survey.

- 4. To meet the sample, collection, preservation, storage and transport requirements in Section 8.0 of Method 21 of 40 CFR Part 60 Appendix A, the instrument evaluation procedures of section 8.1 of Method 21 shall be used.
- 5. 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.
- 6. Any elevated methane reading above 50 parts per million (ppm) above background shall be considered a possible source of odors. The location of the elevated reading shall be marked in the field and recorded on a map or other documentation. Immediate corrective measures shall be completed within five (5) days of observing the elevated reading. Immediate corrective measures may include cover maintenance and/or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each elevated reading. The location(s) where elevated methane readings were recorded and where corrective measures were implemented shall be re-monitored for methane concentrations within ten (10) calendar days of detecting the elevated reading. If the re-monitoring of the location shows a similar elevated reading and landfill gas odors continue to exist in the residential community, Hyland shall evaluate each elevated location to determine if additional corrective measures are required to reduce the methane concentration to 50 ppm above background.
- 7. A report of the methane monitoring events shall be submitted to the NYSDEC regional office Divisions of Air Resources and Solid Waste within 21 days of observing the first elevated reading. The report shall include a summary of the methods used to complete the surface scan, documentation of the methane readings, identification of any elevated readings, description and location of any corrective action completed, results of the re-scan and a proposed plan and schedule for additional corrective measures, if necessary. Such additional corrective measures may include, but are not limited to, installing additional gas collection wells and piping, upgrading the



blower, header pipes or control device.

8. Upon notification by the Department, Hyland shall implement additional corrective actions as approved by the Department according to the schedule contained in the monitoring and corrective action report.

### AMBIENT AIR MONITORING FOR HYDROGEN SULFIDE EMISSIONS

If the Department determines landfill gas odors in the residential community may be present at a concentration that can be reasonably measured by portable monitoring equipment, Hyland shall complete the approved ambient air monitoring program within 14 days of being notified by the Department. The approved ambient air monitoring program is referred to as the Contingency Plan, dated June 17, 2008. The plan includes monitoring, recording and reporting methods for measuring hydrogen sulfide concentrations in ambient air.

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 7/30/2009.

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

