

Facility DEC ID: 6302400036

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 6-3024-00036/00001
Effective Date:

Expiration Date:

Permit Issued To: Oneida-Herkimer RNG Holdings LLC
2400 Ansys Dr Ste 102
Canonsburg, PA 15317

Contact: MARTY RYAN
ONEIDA-HERKIMER RNG, LLC
2400 ANSYS DRIVE, SUITE 102
CANONSBURG, PA 15317
(412) 656-8863

Facility: Oneida-Herkimer RNG LLC
7044 St Rte 294
Boonville, NY 13309

Contact: MARTY RYAN
ONEIDA-HERKIMER RNG, LLC
2400 ANSYS DRIVE, SUITE 102
CANONSBURG, PA 15317
(412) 656-8863

Description:

This (Air State Facility/Air Title V) Permit renewal is issued pursuant to Article 19 (Air Pollution Control) of the Environmental Conservation Law. This facility is located at -----, -----, -----.

This permit allows the operations and of emission units ----- which includes ----- The emission units allow ----- (company description

the operations of emission unit 1-RNGAS, which includes the Renewable Natural Gas (RNG) process to upgrade landfill gas (LFG) from the OHSWA Regional Landfill to natural gas standards for pipeline injection and transmission offsite. The emission unit includes operation of the gas processing pressure swing adsorption (PSA) units, Temperature swing units (TSA), and Sulfur removal unit. The emission unit will include two emission points; an open flare to control off-specification gas, and a thermal oxidizer to control low-BTU tail gas generated by the gas upgrading system.

Facility DEC ID: 6302400036

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: TODD J PHILLIPS
NYSDEC - UTICA SUBOFFICE
207 GENESEE ST
UTICA, NY 13501

Authorized Signature: _____ Date: ____ / ____ / ____

Facility DEC ID: 6302400036

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.

Facility DEC ID: 6302400036

PAGE LOCATION OF CONDITIONS

PAGE

DEC GENERAL CONDITIONS

General Provisions

- | | | |
|---|---|---|
| 5 | 1 | Facility Inspection by the Department |
| 5 | 2 | Relationship of this Permit to Other Department Orders and Determinations |
| 5 | 3 | Applications for permit renewals, modifications and transfers |
| 6 | 4 | Permit modifications, suspensions or revocations by the Department |

Facility Level

- | | | |
|---|---|---|
| 6 | 5 | Submission of application for permit modification or renewal-REGION 6 SUBOFFICE - UTICA |
|---|---|---|

Facility DEC ID: 6302400036

DEC GENERAL CONDITIONS
****** General Provisions ******
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 the expiration of permits for Title V and State Facility Permits.

Item 3.3

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

Facility DEC ID: 6302400036

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

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.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal-REGION 6
SUBOFFICE - UTICA
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 6 Sub-office
 Division of Environmental Permits
 State Office Building, 207 Genesee Street
 Utica, NY 13501-2885
 (315) 793-2555

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: Oneida-Herkimer RNG Holdings LLC
2400 Ansys Dr Ste 102
Canonsburg, PA 15317

Facility: Oneida-Herkimer RNG LLC
7044 St Rte 294
Boonville, NY 13309

Authorized Activity By Standard Industrial Classification Code:
4925 - GAS PRODUCTION/DISTRIBUTION

Permit Effective Date:

Permit Expiration Date:

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

PAGE LOCATION OF CONDITIONS**PAGE****FEDERALLY ENFORCEABLE CONDITIONS****Facility Level**

6	1 6 NYCRR 200.7: Compliance Demonstration
7	2 6 NYCRR 200.7: Compliance Demonstration
8	3 6 NYCRR 200.7: Compliance Demonstration
8	4 6 NYCRR 200.7: Compliance Demonstration
10	5 6 NYCRR 200.7: Compliance Demonstration
11	6 6 NYCRR 200.7: Compliance Demonstration
12	7 6 NYCRR 200.7: Compliance Demonstration
13	8 6 NYCRR 200.7: Compliance Demonstration
14	9 6 NYCRR 200.7: Compliance Demonstration
15	10 6 NYCRR 200.7: Compliance Demonstration
16	11 6 NYCRR 200.7: Compliance Demonstration
17	12 6 NYCRR 201-7.1: Facility Permissible Emissions
17	*13 6 NYCRR 201-7.1: Capping Monitoring Condition
19	*14 6 NYCRR 201-7.1: Capping Monitoring Condition
20	15 6 NYCRR 211.2: Visible Emissions Limited
21	16 6 NYCRR 212-1.7 (a): Compliance Demonstration
22	17 6 NYCRR 212-1.7 (b) (1): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS**Facility Level**

25	18 ECL 19-0301: Contaminant List
26	19 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities
27	20 6 NYCRR Subpart 201-5: Emission Unit Definition
27	21 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
27	22 6 NYCRR 201-5.3 (c): CLCPA Applicability
28	23 6 NYCRR 201-5.3 (c): Compliance Demonstration
28	24 6 NYCRR 211.1: Air pollution prohibited
28	25 6 NYCRR Subpart 257-2: Compliance Demonstration
29	26 6 NYCRR Subpart 257-2: Compliance Demonstration
31	27 6 NYCRR Subpart 257-2: Compliance Demonstration
33	28 6 NYCRR Subpart 257-2: Compliance Demonstration

Emission Unit Level

34	29 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
34	30 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

FEDERALLY ENFORCEABLE CONDITIONS

DRAFT

**** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

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

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

(a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.

(b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

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

Item G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request.

Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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 H: Proof of Eligibility for Sources Defined as Trivial

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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 I: Required Emission Tests - 6 NYCRR 202-1.1

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item J: Open Fires Prohibitions - 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305

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

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

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

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.

FEDERAL APPLICABLE REQUIREMENTS**The following conditions are federally enforceable.****Condition 1: Compliance Demonstration
Effective for entire length of Permit****Applicable Federal Requirement: 6 NYCRR 200.7****Item 1.1:**

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

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01TOX

Item 1.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The facility is using a Flare control emission of the off-specification gas from the upgrade of landfill gas to a renewable natural gas standards. The Flare shall control emission of from the off-specification gas that is generated as part of the process.

The owner/operator shall ensure that the Flare is operating accordingly. The owner/operator will monitor the flow-rate of the Flare with continuous monitors while it is in operation. The Owner/operator shall make sure the Flare operates at the value stated below. This rate will be verified during the emission testing/analysis required under other conditions in this permit. If the results of the testing are different than the value in this condition then the owner/operator shall request a modification to the permit to correct the value.

Parameter Monitored: FLOW RATE

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Upper Permit Limit: 1600 cubic feet per minute (standard conditions)

Reference Test Method: Method 2B

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1 MINUTE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 2: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 200.7

Item 2.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Emission Point: TOX01

Item 2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The owner/operator shall verify operational parameters of the thermal oxidizer that the facility uses to control tail gas from the operation.

The owner/operator shall conduct an emission test/analysis of the operating flow rate of the thermal oxidizer within 180 days of startup of the thermal oxidizer and at the frequency below. The emission test/analysis shall verify the tail gas flow of the thermal oxidizer and the readings of the continuous monitors.

The emission testing/analysis will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date.

Parameter Monitored: FLOW RATE

Upper Permit Limit: 1700 cubic feet per minute (standard conditions)

Reference Test Method: Method 2B

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1 MINUTE

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 3: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 3.1:

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

Emission Unit: 1-RNGAS

Emission Point: FLR01

Item 3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The owner/operator shall verify operational parameters of the Flare that the facility uses to control off-specification gas from the operation.

The owner/operator shall conduct an emission test/analysis of the operating flow rate of the Flare at start up and at the frequency below, based on the operation of the Flare.

The emission test/analysis shall verify the off-specification gas flow of to the Flare and the readings of the continuous monitors.

The emission testing/analysis will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date.

Parameter Monitored: FLOW RATE

Upper Permit Limit: 1600 cubic feet per minute (standard conditions)

Reference Test Method: Method 2B

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 1 HOUR ROLLING AVERAGE ROLLED EVERY 1 MINUTE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 4: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 4.1:

The Compliance Demonstration activity will be performed for the facility:

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Emission Point: TOX01

Regulated Contaminant(s):

CAS No: 007783-06-4

HYDROGEN SULFIDE

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility owner or operator shall not allow emissions of sulfur dioxide to violate the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide.

The applicant has demonstrated that sulfur dioxide emissions for this facility are in compliance with the 1-hour NAAQS standard.

The facility owner or operator shall verify the parameters used to demonstrate compliance with the 1-hour NAAQS for sulfur dioxide. These parameters include, but are not limited to, landfill gas (LFG) flow rate and testing/analysis of gas stream for hydrogen sulfide concentration at the inlet to the thermal oxidizer at the limit below.

The emission testing will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date. The owner/operator shall verify emissions from the thermal oxidizer at the facility. This shall be accomplished by the facility conducting emission testing 180 days of the thermal oxidizer start up.

Upper Permit Limit: 20 parts per million by volume (dry, corrected to 7% O₂)

Reference Test Method: Method 11

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 3-hour average

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 5: Compliance Demonstration

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Effective for entire length of Permit**Applicable Federal Requirement: 6 NYCRR 200.7****Item 5.1:**

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

Emission Unit: 1-RNGAS

Emission Point: TOX01

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility is using a thermal oxidizer to control emission of the Tail gas from the upgrade of landfill gas to a renewable natural gas standards. The thermal oxidizer will control emission of from the tail gas that is generated as part of the process.

The owner/operator shall conduct an emission test within 180 days of startup to determine appropriate emissions factors for the thermal oxidizer to calculate emissions. Emissions for the thermal oxidizer and facility shall be calculated in tons per 12 month period, rolled monthly, to confirm facility emissions are less than the SO₂ major source threshold, and to ensure the PTE emissions of SO₂ are below the NAAQS.

The emission testing will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date. The owner/operator shall verify emissions from the thermal oxidizer at the facility. This shall be accomplished by the facility conducting emission testing within 180 days of startup.

Upper Permit Limit: 95 tons per year

Reference Test Method: Method 6C

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Condition 6: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 6.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
 Monitoring Description:

The facility owner or operator shall conduct a visible emissions observation of all emission points and emission sources specified by this condition once per day while the process is in operation.

1) Observe the stack for each emission source which is operating, once per day for visible emissions. This observation(s) must be conducted during daylight hours, but not during periods of adverse weather conditions (fog, rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:

- date and time of observation
- observer's name
- identity of the emission point
- weather conditions
- was a plume observed

Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) for two consecutive days, either a Method 9 or Method 22 analysis (based upon the source emitting the visible emissions) of the affected emission point(s) or emission source(s) must be conducted within two (2) business days of such occurrence. The results of either the Method 9 or Method 22 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing either the Method 9 or Method 22 analysis if the opacity standard has been contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

acceptance.

**** NOTE **** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Reference Test Method: SEE MONITORING DESCRIPTION

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 7: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 7.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01FLR

Item 7.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The facility is using a Flare to control emission of the Off-Spec gas from the upgrade of landfill gas to a renewable natural gas standards. The Flare will control emission of from the Off-Spec gas that is generated as part of the process, during periods of startup, shutdown and malfunction. When the facility is not in operation the landfill gas will be sent to the flares associated with the landfill.

The owner/operator shall ensure that the Flare is operating accordingly. The owner/operator will monitor the flow rate of the Off-Spec gas to the flare when the flare is in operation. The Owner/operator shall make sure the flare operates at the off-spec gas throughput at the value stated below. This rate is based on 100% operation on off-spec gas for a 10% annual uptime.

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Parameter Monitored: HEAT RATE

Upper Permit Limit: 83871 million British thermal units
per yearMonitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTIONAveraging Method: AVERAGING METHOD - 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 8: Compliance Demonstration
Effective for entire length of Permit**Applicable Federal Requirement: 6 NYCRR 200.7****Item 8.1:**The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01TOX

Regulated Contaminant(s):

CAS No: 007446-09-5	SULFUR DIOXIDE
CAS No: 0NY998-00-0	VOC
CAS No: 0NY210-00-0	OXIDES OF NITROGEN

Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility is using a thermal oxidizer to control emission of the Tail gas from the upgrade of landfill gas to a renewable natural gas standards. The thermal oxidizer will control emission of from the tail gas that is generated as part of the process.

The facility shall conduct an emission test of the thermal oxidizer within 180 days of startup, and as required. The facility shall verify the appropriate emission factors from the thermal oxidizer to calculate annual emissions. Emissions for the thermal oxidizer shall be calculated to confirm facility emissions are less than applicable permit limits. During the testing the facility will determine the process parameters of the thermal oxidizer.

The emission testing will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

should be submitted to the Department for review sixty
(60)days prior to the anticipated emissions test date.

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

Condition 9: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 9.1:

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

Emission Unit: 1-RNGAS Emission Point: TOX01

Regulated Contaminant(s):
CAS No: 000074-82-8 METHANE

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility is using a thermal oxidizer to control emission of the Tail gas from the upgrade of landfill gas to a renewable natural gas standards. The thermal oxidizer will control emission of from the tail gas that is generated as part of the process.

The owner/operator shall conduct an emission test of the thermal oxidizer within 180 days of startup. The facility shall verify the control efficiency from the thermal oxidizer at the percentage rate listed below. The testing for the listed contaminant will provide verification of control efficiency of the thermal oxidizer for the listed contaminant.

The emission testing will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60)days prior to the anticipated emissions test date. The owner/operator shall verify emissions from the thermal oxidizer at the facility. This shall be accomplished by the facility conducting emission testing within 180 days of startup.

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Lower Permit Limit: 98 percent degree of air cleaning or greater

Reference Test Method: Method 3C

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 3-hour average

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 10: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 200.7

Item 10.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01FLR

Regulated Contaminant(s):

CAS No: 000074-82-8 METHANE

Item 10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility is using a Flare to control emission of the Off-Spec gas from the upgrade of landfill gas to a renewable natural gas standards. The Flare will control emission of from the Off-Spec gas that is generated as part of the process.

The owner/operator shall conduct an emission test/analysis of the Off-Spec gas to the Flare at the startup of the flare and at the frequency below. The emission test/analysis shall verify the BTU content of the off-spec gas that the facility is monitoring when the flare is operating. The Flare is limited to the value listed below based on 100% operation on off spec gas for a 10% annual uptime.

The emission testing/analysis will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date.

Upper Permit Limit: 83871 million British thermal units

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

per year
 Reference Test Method: ASTM d3588
 Monitoring Frequency: ONCE EVERY TEN YEARS
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 Subsequent reports are due every 6 calendar month(s).

Condition 11: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.7

Item 11.1:

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

Emission Unit: 1-RNGAS

Emission Point: TOX01

Item 11.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility shall ensure the air emissions for this facility are in compliance with values in the permit application.

The facility owner or operator shall verify the parameters used to demonstrate compliance with the air emissions on a weekly basis. These parameters include, but are not limited to, landfill gas (LFG) flow rate and field testing of LFG concentration at the inlet to the RNG facility using appropriate sampling equipment or a handheld monitor. The handheld monitor (e.g., Gas Detection Tube, Landtec GEM 5000+, MRU Optima and, or equivalent) shall be operated, calibrated and maintained in accordance with the manufacturer's specifications. Any significant change to these parameters or any method of operation which could increase the emissions, increase the emission rate potential, decrease the air cleaning control efficiency, or provide cause to alter the environmental rating of any contaminant may require a modification to the permit and will require facility and DEC reevaluation to ensure continued compliance with the NAAQS for sulfur dioxide.

Additionally, the facility owner or operator must investigate, in a timely manner, any instance where there is reason to believe that there is, or has been, an emission increase above those listed on the application or In such cases, the facility owner or operator shall

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

investigate the cause, make any corrections, and verify that the potential excess emissions problem has been corrected.

On a ten year basis, the facility shall collect a sample of LFG to the inlet of the RNG facility for submission to a National ELAP accredited laboratory (or NYSDOH ELAP accredited laboratory or other DEC approved laboratory) to analyze the concentrations of the LFG with appropriate EPA Method or appropriate ASTM methods (or a DEC approved equivalent method), in compliance and required by other conditions in this permit. Field testing of concentrations using colorimetric gas detection tubes shall be taken concurrently with the collection of analytical samples. Analytical results must be submitted to the Department within one week of receipt of the results. The most recent LFG sample analysis result will be used to confirm the accuracy of the colorimetric gas detection tube readings and the calculated .

Analytical results shall be submitted to the Department in the annual report and within one week of receipt of the results.

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 12: Facility Permissible Emissions
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 201-7.1

Item 12.1:

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: 0NY210-00-0

Name: OXIDES OF NITROGEN

PTE: 190,000 pounds per year

CAS No: 0NY998-00-0

Name: VOC

PTE: 90,000 pounds per year

**Condition 13: Capping Monitoring Condition
Effective for entire length of Permit**

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Applicable Federal Requirement: 6 NYCRR 201-7.1**Item 13.1:**

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 201-6

Item 13.2:

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

Item 13.3:

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 13.4:

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 13.5:

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 13.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 13.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The owner/operator shall limit the emissions of the listed contaminants to the limit listed below. The determination of the emission will be based on information obtained from other requirements and monitoring within this permit. The facility shall calculate the annual

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

emission of the listed contaminants as stated below.

The owner/operator shall use then operational parameters of the equipment or the gas analysis of the gas streams to verify concentration of the gas streams in order to calculate emissions. will

The facility shall maintains record in a format that is acceptable to the Department. The calculations used to determine the emissions shall be acceptable to the department.

If the emissions shall exceed the limits of this requirement, the facility shall notify the department by submitting the appropriate information to modify the permit.

Parameter Monitored: VOC

Upper Permit Limit: 45 tons per year

Monitoring Frequency: MONTHLY

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 14: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 14.1:

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 201-6

Item 14.2:

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

Item 14.3:

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 14.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

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 14.5:

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 14.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 14.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The owner/operator shall limit the emissions of the listed contaminants to 95 tons per year. The determination of the emission will be based on information obtained from other requirements and monitoring within this permit. The facility shall calculate the annual emission of the listed contaminants as stated below.

The facility shall maintains record in a format that is acceptable to the Department. The calculations used to determine the emissions shall be acceptable to the department.

If the emissions shall exceed the limits of this requirement, the facility shall notify the department by submitting the appropriate information to modify the permit.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 95 tons per year

Monitoring Frequency: MONTHLY

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 15: Visible Emissions Limited
Effective for entire length of Permit

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Applicable Federal Requirement: 6 NYCRR 211.2**Item 15.1:**

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.

**Condition 16: Compliance Demonstration
Effective for entire length of Permit****Applicable Federal Requirement: 6 NYCRR 212-1.7 (a)****Item 16.1:**

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

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01TOX

Regulated Contaminant(s):

CAS No: 000074-82-8

METHANE

CAS No: 007647-01-0

HYDROGEN CHLORIDE

CAS No: 000108-88-3

TOLUENE

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility owner/operator shall not allow the emission of toxic contaminants with a B rating to exceed the AGC/SGC for those contaminants, based on AERSCREEN modeling used by the facility. Besides Toluene the modeled contaminants include Hexane, Xylene M, O & P Mixtures, and Hydrogen Chloride.

The facility shall conduct an emission test of the thermal oxidizer within 180 days of startup. The thermal oxidizer is used to control emission of the Tail gas from the upgrade of landfill gas to a renewable natural gas standards. The facility shall verify the control efficiency from the thermal oxidizer at the percentage rate listed below. The testing for the listed contaminants will serve as a surrogate for the other toxic contaminants of concern.

The emission testing will be in accordance with 6 NYCRR Part 202-1. The testing shall be conducted based on a protocol that is approved by the NYSDEC. If an alternative methodology is opted for, then a protocol

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

should be submitted to the Department for review sixty (60) days prior to the anticipated emissions test date.

Lower Permit Limit: 98 percent degree of air cleaning or greater

Reference Test Method: Method 3C, 18, 26

Monitoring Frequency: ONCE EVERY TEN YEARS

Averaging Method: 3-hour average

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 17: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b) (1)

Item 17.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-RNGAS

Process: RNG

Emission Source: 01TOX

Regulated Contaminant(s):

CAS No: 001330-20-7

XYLENE, M, O & P MIXT.

CAS No: 000108-88-3

TOLUENE

Item 17.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The Facility owners and/or operators of any emission source equipped with either a thermal oxidizer, must install continuous monitors and data recorders to monitor the exhaust gas temperature prior to start-up of a new or modified process emission source(s). Continuous monitors must be operated at all times when the associated emission control equipment is operating except during any quality assurance and routine maintenance activities. Each monitor must be operated according to the manufactures specifications. Alternative monitoring methods may be employed subject to department approval. Corrective actions will be taken if the temperature falls below the perscribed lower limit. The facility will maintain a record of corrective action.

The contanamints listed are classified as B rated contaminants. Non-criteria contaminants given an ER of B and having an emission rate potential (ERP) of less than 10 pounds per hour must demonstrate that ambient impacts of each contaminant at the fence line of the facility are

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

less than the annual (AGC) and short term (SGC) guideline concentrations for the air contaminant. The facility has demonstrated acceptable impacts when of the listed contaminants emissions when the oxidizer is operated at the temperature listed below, which shall be verified by performance testing.

Parameter Monitored: TEMPERATURE

Lower Permit Limit: 82.4 degrees F below the approved
performance test combustion
temperature

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: 3-hour average

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

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: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

(1) an emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;

(2) the equipment at the facility was being properly operated and maintained;

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

(4) the facility owner 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 any corrective actions taken.

(b) In any enforcement proceeding, the facility owner 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 malfunction provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

with 6 NYCRR Part 616 - Public Access to Records.
Facility owners and/or operators must submit the records
required to comply with the request within sixty working
days of written notification by the Department.

Item C: **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 only enforceable.

Condition 18: Contaminant List
Effective for entire length of Permit

Applicable State Requirement:ECL 19-0301**Item 18.1:**

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: 000108-88-3

Name: TOLUENE

CAS No: 001330-20-7

Name: XYLENE, M, O & P MIXT.

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 007647-01-0
Name: HYDROGEN CHLORIDE

CAS No: 007783-06-4
Name: HYDROGEN SULFIDE

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

CAS No: 0NY998-00-0
Name: VOC

Condition 19: Malfunctions and Start-up/Shutdown Activities
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR 201-1.4

Item 19.1:

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.

(c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.

(d) The department may also require the facility owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 20: Emission Unit Definition
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 20.1:

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

Emission Unit: 1-RNGAS

Emission Unit Description:

Emission Unit 1-RNGAS consists of the Renewable Natural Gas (RNG) process to upgrade landfill gas (LFG) to natural gas standards for pipeline injection and transmission offsite. The emission unit includes operation of the gas processing pressure swing adsorption (PSA) units. The emission unit will include two emission points; an open flare to control off-specification gas, and a thermal oxidizer to control low-BTU tail gas generated by the gas upgrading system.

Building(s): RNGBLDG

Condition 21: Renewal deadlines for state facility permits
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR 201-5.2 (c)

Item 21.1:

The owner or operator of a facility having an issued state facility 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.

Condition 22: CLCPA Applicability
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR 201-5.3 (c)

Item 22.1:

Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

emissions are reduced by 85% of 1990 levels.

Condition 23: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 23.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Any reports or submissions required by this permit shall
be submitted to the Regional Air Pollution Control
Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 6
State Office Building
317 Washington Ave.
Watertown, NY 13601

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 24: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.1

Item 24.1:

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 25: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 257-2

Item 25.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

CAS No: 007783-06-4 HYDROGEN SULFIDE

Item 25.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The owner/operator has demonstrated that sulfur dioxide emissions for this facility are in compliance with the 1-hour NAAQS standard.

The facility owner or operator shall verify the concentration of H₂S in the gas stream to demonstrate compliance with the air emissions on a weekly basis, when the thermal oxidizer is operating. Field testing of concentration using colorimetric gas detection tubes or a handheld monitor. The handheld monitor (e.g., Gas Detection Tube, Landtec GEM 5000+, MRU Optima and, or equivalent) shall be operated, calibrated and maintained in accordance with the manufacturer's specifications. Any significant change to these parameters or any method of operation which could increase the emissions, increase the emission rate potential, decrease the air cleaning control efficiency, or provide cause to alter the environmental rating of any contaminant may require a modification to the permit and will require facility and DEC reevaluation to ensure continued compliance with the NAAQS for sulfur dioxide. The facility will also monitor gas flow rate to the thermal oxidizer during operation.

All records kept pursuant to this condition must be provided to the Department upon request.

Parameter Monitored: HYDROGEN SULFIDE

Upper Permit Limit: 20 parts per million by volume (dry,
corrected to 7% O₂)Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTIONAveraging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 26: Compliance Demonstration
Effective for entire length of Permit

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Applicable State Requirement: 6 NYCRR Subpart 257-2**Item 26.1:**

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

Emission Unit: 1-RNGAS

Emission Point: TOX01

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility owner or operator shall not allow emissions of sulfur dioxide to violate the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide.

The applicant has demonstrated that sulfur dioxide emissions for this facility are in compliance with the 1-hour NAAQS standard.

On a ten year basis, the facility shall collect a sample of LFG to the inlet of the thermal oxidizer for submission to a National ELAP accredited laboratory (or NYSDOH ELAP accredited laboratory or other DEC approved laboratory) to analyze the concentration of total reduced sulfur compounds and hydrogen sulfide in accordance with EPA Method 3C for fixed gases and ASTM D5504 for reduced sulfide gases (or a DEC approved equivalent method), in compliance and required by other conditions in this permit. Field testing of hydrogen sulfide concentrations using colorimetric gas detection tubes shall be taken concurrently with the collection of analytical samples. Analytical results must be submitted to the Department within one week of receipt of the results. The most recent LFG sample analysis result will be used to confirm the accuracy of the colorimetric gas detection tube readings and the calculated weekly SO₂ emission rates.

Analytical results shall be submitted to the Department in the annual report and within one week of receipt of the results.

The facility owner or operator shall verify the operating parameters of equipment to demonstrate compliance with the 1-hour NAAQS for sulfur dioxide during the testing/analysis. These parameters include, the operating parameters of the TSA and 1st PSA

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

equipment.

Parameter Monitored: HYDROGEN SULFIDE
 Upper Permit Limit: 20 parts per million by volume (dry,
 corrected to 7% O₂)
 Reference Test Method: Method 6
 Monitoring Frequency: ONCE EVERY TEN YEARS
 Averaging Method: 3-hour average
 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 Demonstration
Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR Subpart 257-2

Item 27.1:

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

Emission Unit: 1-RNGAS Emission Point: FLR01

Regulated Contaminant(s):
 CAS No: 007446-09-5 SULFUR DIOXIDE

Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility owner or operator shall not allow emissions of sulfur dioxide to violate the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide.

The applicant has demonstrated that sulfur dioxide emissions for this facility are in compliance with the 1-hour NAAQS standard.

On a ten year basis, the facility shall collect a sample of LFG to the inlet of the flare for submission to a National ELAP accredited laboratory (or NYSDOH ELAP accredited laboratory or other DEC approved laboratory) to analyze the concentration of total reduced sulfur compounds and hydrogen sulfide in accordance with EPA

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Method 3C for fixed gases and ASTM D5504 for reduced sulfide gases (or a DEC approved equivalent method), in compliance and required by other conditions in this permit. . Field testing of hydrogen sulfide concentrations using colorimetric gas detection tubes shall be taken concurrently with the collection of analytical samples. Analytical results must be submitted to the Department within one week of receipt of the results. The most recent LFG sample analysis result will be used to confirm the accuracy of the colorimetric gas detection tube readings and the calculated weekly SO₂ emission rates.

Analytical results shall be submitted to the Department in the annual report and within one week of receipt of the results.

The facility owner or operator shall verify the operating parameters of equipment to demonstrate compliance with the 1-hour NAAQS for sulfur dioxide during the testing/analysis. These parameters include, the operating parameters of the 2nd PSA equipment.

Parameter Monitored: HYDROGEN SULFIDE
Upper Permit Limit: 20 parts per million by volume (dry,
corrected to 7% O₂)
Reference Test Method: Method 6
Monitoring Frequency: ONCE EVERY TEN YEARS
Averaging Method: 3-hour average
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 28: Compliance Demonstration

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Effective for entire length of Permit

Applicable State Requirement: 6 NYCRR Subpart 257-2

Item 28.1:

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

Emission Unit: 1-RNGAS

Emission Point: FLR01

Item 28.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The owner /operator shall not allow emissions of sulfur dioxide to violate the National Ambient Air Quality Standards (NAAQS) for sulfur dioxide.

The facility owner or operator shall verify the concentration of H₂S in the gas stream to demonstrate compliance with the air emissions when the flare is operating. Field testing of concentration using colorimetric gas detection tubes or a handheld monitor. The handheld monitor (e.g., Gas Detection Tube, Landtec GEM 5000+, MRU Optima and, or equivalent) shall be operated, calibrated and maintained in accordance with the manufacturer's specifications. Any significant change to these parameters or any method of operation which could increase the emissions, increase the emission rate potential, decrease the air cleaning control efficiency, or provide cause to alter the environmental rating of any contaminant may require a modification to the permit and will require facility and DEC reevaluation to ensure continued compliance with the NAAQS for sulfur dioxide. The facility will also monitor gas flow rate to the Flare during operation.

All records kept pursuant to this condition must be provided to the Department upon request.

Parameter Monitored: HYDROGEN SULFIDE

Upper Permit Limit: 20 parts per million by volume (dry,
corrected to 7% O₂)

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.

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

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

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

**Condition 29: Emission Point Definition By Emission Unit
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 29.1:

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

Emission Unit: 1-RNGAS

Emission Point: FLR01

Height (ft.): 50

Diameter (in.): 12

NYTMN (km.): 4811.657 NYTME (km.): 466.587

Emission Point: TOX01

Height (ft.): 50

Diameter (in.): 48

NYTMN (km.): 4811.736 NYTME (km.): 466.363

**Condition 30: Process Definition By Emission Unit
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 30.1:

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

Emission Unit: 1-RNGAS

Process: RNG

Source Classification Code: 5-01-004-33

Process Description:

The RNG process will include removal of moisture in a temperature swing absorption (TSA) unit from the collected landfill gas, compression through the electric driven compressor, then cleaning through a series of pressure swing adsorption (PSA) units. Once cleaned, the RNG will be again compressed by electric driven compressors and injected into the natural gas pipeline for transport off-site. Gaseous contaminants cleaned from the RNG in the PSA units (high concentration CO₂ and trace contaminants referred to as tail gas) is piped to a thermal oxidizer for destruction by combining with natural gas (to raise the Btu content to a sufficient point to combust cleanly). RNG that does not meet pipeline specifications will be sent to the flare for destruction. During periods of facility downtime, landfill gas will be controlled by the OHSWA flare(s).

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036

Note: The Thermal oxidizer and the Flare are located outside the building a distance away in opposite directions.

Emission Source/Control: 01FLR - Control
Control Type: FLARING

Emission Source/Control: 01TOX - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: TRMT1 - Process
Design Capacity: 3,300 cubic feet per minute (standard conditions)

Permit ID: 6-3024-00036/00001

Facility DEC ID: 6302400036