Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

10/21/2010

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Liza Mireles
Carbon Limestone Landfill Gas Power Station
c/o Energy Developments Inc
16360 Park Ten Place, Suite 218
Houston, TX 77084

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0250050996
Permit Number: P0106069
Permit Type: Initial Installation
County: Mahoning

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Youngstown-Vindicator. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; West Virginia

Permit Strategy Write-Up

1. Check all that apply:

   _X_ Synthetic Minor Determination

   ___ Netting Determination

2. Source Description: The installation of two internal combustion engines burning landfill gas (LFG). Hourly restrictions are in place to avoid exceeding 40 TPY and thus triggering a PSD review.

3. Facility Emissions and Attainment Status: Mahoning County is attainment for ozone. The facility is a Title V Facility and has emissions of NO_x (343.4 TPY) and CO (580.3 TPY) exceeding 100 TPY (not including this permit).

4. Source Emissions: Emissions are mainly products of combustion. Slight HCl emissions due to some landfill gas containing chlorines.

5. Conclusion: Issue the permit

6. Please provide additional notes or comments as necessary:

   These units were originally permitted under a previous PTI; however, the facility did not install these units before the allotted time expired. Therefore, a new PTI application was required to be submitted. It was then noticed that proposed emissions of NO_x would have exceeded 40 TPY, thus requiring a PSD to be performed. The facility did not wish to conduct a PSD study; therefore, the facility chose to limit NO_x emissions below 40 TPY.

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
CO	76.54
VOC	5.54
PM_{10}	3.01
NO_x	39.9
OC	119.29
SO_2	1.63
HCl	1.06
PM	7.33

Mahoning County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
Carbon Limestone Landfill Gas Power Station

Issue Date: 10/21/2010
Permit Number: P0106069
Permit Type: Initial Installation
Permit Description: Installation of two (2) - 1400 bkW (14.0 mmBtu/hr) Deutz TBG 620 V16 K Internal Combustion Engines to produce electricity from landfill gas. NOTE: These were originally intended to be installed under PTI 02-16880; however, the allowable time to install expired. Therefore, this permit was applied for and a new emission unit IDs (P018) and (P019) were assigned.
Facility ID: 0250050996
Facility Location: Carbon Limestone Landfill Gas Power Station
8100 South Stateline Road,
Lowellville, OH 44436
Facility Description: Other Electric Power Generation

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Amysue O'Reilly at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 43087 or (330)425-9171. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install
for
Carbon Limestone Landfill Gas Power Station

Facility ID: 0250050996
Permit Number: P0106069
Permit Type: Initial Installation
Issued: 10/21/2010
Effective: To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Carbon Limestone Landfill Gas Power Station

Table of Contents

Authorization

Facility ID: 0250050996
Facility Description: Landfill gas power station
Application Number(s): A0039103, A0039920, A0040203
Permit Number: P0106069
Permit Description: Installation of two (2) - 1400 bkW (14.0 mmBtu/hr) Deutz TBG 620 V16 K Internal Combustion Engines to produce electricity from landfill gas. NOTE: These were originally intended to be installed under PTI 02-16880; however, the allowable time to install expired. Therefore, this permit was applied for and a new emission unit IDs (P018) and (P019) were assigned.
Permit Type: Initial Installation
Permit Fee: $50.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 10/21/2010
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Carbon Limestone Landfill Gas Power Station
8100 South Stateline Road
Lowellville, OH 44436

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0106069
Permit Description: Installation of two (2) - 1400 bkW (14.0 mmBtu/hr) Deutz TBG 620 V16 K Internal Combustion Engines to produce electricity from landfill gas. NOTE: These were originally intended to be installed under PTI 02-16880; however, the allowable time to install expired. Therefore, this permit was applied for and a new emission unit IDs (P018) and (P019) were assigned.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P018**
Company Equipment ID:	IC Engine #15
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P019**
Company Equipment ID:	IC Engine #16
Superseded Permit Number:	02-16880
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.
Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. MACT Subpart AAAA and Subpart A Requirements

   a) Applicable Emissions Limitations and/or Control Requirements

      (1) The following emissions units contained in this permit are subject to MACT Subpart AAAA as control equipment for an existing affected source: P018 and P019. The complete MACT requirements will be established in the Title V Permit for this facility which will encompass these emissions units upon issuance. The applicable sections of the MACT Subpart AAAA have been cited in the appropriate sections for the emissions units subject to this rule.

   b) Operational Restrictions

      (1) The permittee shall comply with the applicable compliance standards required under 40 CFR Part 63, Subpart AAAA including the following sections:

a.	63.1935(a)(3)	Existing Affected Sources
b.	63.1945(f) 63.1955(b)	Compliance requirements for Existing, Area Sources
c.	Appendix, Table 1	Applicable General Provisions

   c) Monitoring and/or Recordkeeping Requirements

      (1) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart AAAA, including the following sections:

a.	63.1945(b)	Initial Compliance by January 16, 2004
b.	63.1960	Compliance Methods
c.	63.1965	Deviation Clarifications for SSM Plans and Control Device Operating Parameters
d.	63.1975	Calculating 3-hour Block Average for Control Device Operating Parameters
e.	63.1980(a)(b)	Required Records

d) Reporting Requirements

(1) The permittee shall submit semiannual reports and such other notifications and reports to the Ohio EPA, Northeast District Office as are required pursuant to 40 CFR Part 63, Subpart AAAA, per the following sections:

a.	63.1980	Semi-Annual Reporting Requirements

e) Testing Requirements

(1) These units are similar to emissions units P001 through P014 that are already installed at the facility. Emissions units P108 and P019 shall be emissions tested in line with the rotation of testing that is in place for emissions units P001 through P014. Demonstrating compliance with the testing requirements of this permit shall be based upon testing three (3) of the units. If the results of testing three units demonstrate that either any of the three units tested are not in compliance with the permit allowable emission limitations, or that there is greater than a 10% variance of each other, Ohio EPA may require the facility to test an additional three (3) emissions units that have not been tested to date. After issuance of a Title V permit, the facility shall test three (3) emissions units at the time of each permit renewal, rotating through the existing emissions units until all have been tested at least once, then continuing to rotate through the emissions units in the order in which they were initially tested.

C. Emissions Unit Terms and Conditions

1. P018, IC Engine #15

Operations, Property and/or Equipment Description:

1400 bkW (14.0 mmBtu/hr) Deutz TBG 620 V16 K Internal Combustion Engine to produce electricity from landfill gas. NOTE: This was originally intended to be installed under PTI 02-16880; however, the allowable time to install expired. Therefore, this permit was applied for and a new emissions unit ID (P018) was assigned.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(10), d)(11), d)(12) and e)(4)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions shall not exceed 10% opacity as a 6-minute average. Carbon monoxide (CO) emissions shall not exceed 9.4 pounds per hour. Nitrogen oxide (NO_x) emissions shall not exceed 4.9 pounds per hour. Organic compound (OC) emissions shall not exceed 14.65 pounds per hour. Hydrogen chloride (HCl) emissions shall not exceed 0.13 pound per hour.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	Particulate emissions less than 10 microns in diameter (PM_{10}) shall not exceed 0.37 pound per hour. Particulate emissions (PE) shall not exceed 0.9 pound per hour. Sulfur dioxide (SO_2) emissions shall not exceed 0.23 pound per hour. Volatile organic compound (VOC) emissions shall not exceed 0.68 pound

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		per hour. See b)(2)d.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/2006	See b)(2)e.
d.	OAC rule 3745-31-05(D)(1)(a)	PM_{10} emissions from emissions units P018 and P019, combined, shall not exceed 3.01 tons per year. PE from emissions units P018 and P019, combined, shall not exceed 7.33 tons per year. CO emissions from emissions units P018 and P019, combined, shall not exceed 76.54 tons per year. NO_x emissions from emissions units P018 and P019, combined, shall not exceed 39.90 tons per year. OC emissions from emissions units P018 and P019, combined, shall not exceed 119.29 tons per year. SO_2 emissions from emissions units P018 and P019, combined, shall not exceed 1.63 tons per year. VOC emissions from emissions units P018 and P019, combined, shall not exceed 5.54 tons per year. HCl emissions from emissions units P018 and P019, combined, shall not exceed 1.06 tons per year. See b)(2)a and b)(2)c.
e.	OAC rule 3745-17-11(B)(5)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-18-06	The emission limitation required by this applicable rule is less stringent than the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	40 CFR Part 60, Subpart WWW	See b)(2)b.
i.	40 CFR Part 63, Subpart AAAA	See B.2.
j.	40 CFR Part 63, Subpart A	Table 1 of 40 CFR Part 63, Subpart AAAA provides a list of the General Provisions from 40 CFR 63.1 through 63.15 that are applicable to this emissions unit.

(2) Additional Terms and Conditions

a. The internal combustion engine shall operate using lean burn technology.

b. Collected landfill gas shall be treated for sale or additional use per 40 CFR 60.752(b)(2)(iii)(C) or shall be routed to a control system per 40 CFR 60.752(b)(2)(iii)(B). The control system shall be designed and operated to reduce the non-methane organic compound (NMOC) by 98 weight-percent or the outlet NMOC emissions shall be reduced to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

c. The maximum combined annual operating hours of P018 and P019 shall not exceed 16,285.7, based upon a rolling, 365-day summation of the operating hours.

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PM_{10}, PE, VOC and SO_2 from this air contaminant source since the calculated annual emission rates are each less than 10 tons per year.

c) Operational Restrictions

(1) The permittee shall burn only landfill gas as fuel in this emissions unit.

(2) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

(3) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), the permittee has committed to compressing, filtering for particles up to 10 microns in diameter, and dewatering the landfill gas.

Dewatering shall be defined as a reduction of the dew point of the landfill gas by at least 20 degrees Fahrenheit.

(4) The allowable gas flow rate to the internal combustion engine's combustion chambers shall be determined during the most recent compliance test.

(5) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), the minimum allowable average temperature of the internal combustion engine's combustion chambers, based on 3-hour blocks of time, shall not be lower than the minimum combustion temperature that was established during the most recent compliance test that demonstrated compliance with the applicable requirements.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving each emissions unit. The presence or absence of any visible emissions shall be noted in an operations log for each unit. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the cause of the visible emissions;

c. the total duration of any visible emissions incident; and

d. any corrective actions taken to eliminate the visible emissions.

(2) The permittee shall record the dates and times when the landfill gas is treated for sale or additional use and when the internal combustion engines are operated as landfill gas control devices.

(3) The permittee shall install, calibrate and maintain a continuous device that monitors and records the temperature of the landfill gas prior to dewatering and after dewatering. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), the temperature shall be monitored at all times.

(4) The permittee shall install, calibrate and maintain a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of +/- 1 percent of

the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater, for the exhaust of the internal combustion engines. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), the temperatures shall be monitored at all times.

(5) The permittee shall install, calibrate, and maintain a device that monitors and records gas flow to or bypass of the internal combustion engines. The gas flow rate measuring device shall record the flow to the control device at least every 15 minutes.

(6) When attempting to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(B), the permittee shall collect and record each day all 3-hour blocks of time during which the average combustion chamber temperature within the internal combustion engine was less than the allowable minimum operating temperature as established during the most recent compliance test.

(7) The permittee shall collect and record each day all 3-hour blocks of time during which the average landfill gas flow rate to the internal combustion engine exceeds the maximum allowable gas flow as established during the most recent compliance test.

(8) The permittee shall record each day when a fuel other than landfill gas was burned in this emissions unit.

(9) The permittee shall maintain daily records of the following information:

a. the operating hours for P018 and P019 each day;

b. the combined operating hours for P018 and P019 each day; and

c. the rolling, 365-day summation of the combined operating hours of P018 and P019.

(10) The PTI application for these emissions unit(s), P018 and P019, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: Hydrogen Chloride

Ceiling Value (ppm) : 5.0

Maximum Hourly Emission Rate (lbs/hr): 0.26

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.684

MAGLC (ug/m3): 57

The permittee, has demonstrated that emissions of Hydrogen chloride, from emissions unit(s) P018 and P019, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

(11) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(12) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. describe any corrective actions taken to eliminate the visible particulate emissions;

c. identify the date(s) and duration the gas flow rate to the internal combustion engine exceeded the maximum gas flow rate requirements, as established during the most recent compliance stack test, as a 3-hour average;

d. when demonstrating compliance with 40 CFR 60.752 (b)(2)(iii)(C), identify the date(s) and duration when the temperature difference of the landfill gas between pre-dewatering and post-dewatering is less than 20 degrees Fahrenheit;

e. when demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), identify the date(s) and duration of each 3-hour block of time when the average temperature within the internal combustion engine did not meet the minimum temperature requirements; and

f. all exceedances of the rolling, 365-day restriction on the hours of combined operation for emissions units P018 and P019.

These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than landfill gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) Any breakdown or malfunction resulting in the emission of raw landfill gas emissions to the atmosphere shall be reported by phone to the Northeast District Office of Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and remedial measures shall be undertaken immediately to correct the problem and prevent further emissions to the atmosphere. A summary of the breakdown or malfunction, including the date(s) and time(s) and the measure(s) taken to correct the problem shall be included in the semi-annual deviation report.

(4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(5) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted in accordance with the facility-wide terms and conditions in B.2.e)(1) of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NO_x, CO, VOC and HCl.

c. Unless the permittee can demonstrate that all landfill gas burned in the internal combustion engines has been compressed, filtered for particulates up to 10 microns in diameter, and dewatered since the previous compliance test, the emission testing shall be conducted to demonstrate compliance with either the removal of 98 weight-percent of NMOC or the reduction of the outlet concentration of NMOC to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen. Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR 60.754(d).

d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

PE – Method 5 of 40 CFR Part 60, Appendix A;
NO_x - Method 7 or 7E of 40 CFR Part 60, Appendix A;
CO - Method 10 of 40 CFR Part 60, Appendix A;
HCl - Method 26 or 26A of 40 CFR Part 60, Appendix A; and
OC/VOC - Method 25 or 25A of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

f. During each test run the permittee shall monitor the operating temperature and the gas flow rate of the internal combustion engine's combustion chambers in order to establish the minimum allowable operating temperature and the maximum allowable gas flow rate as referenced in c)(4), c)(5), d)(6) and d)(7).

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

h. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Compliance with the emission limitations established in this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

PM_{10} emissions shall not exceed 0.37 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201.

b. Emission Limitation:

PE shall not exceed 0.9 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5.

c. Emission Limitation:

CO emissions shall not exceed 9.4 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10.

d. Emission Limitation:

NO_x emissions shall not exceed 4.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

e. Emission Limitation:

OC emissions shall not exceed 14.65 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25C.

f. Emission Limitation:

SO_2 emissions shall not exceed 0.23 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

g. Emission Limitation:

VOC emissions shall not exceed 0.68 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25C.

h. Emission Limitation:

HCl emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A.

i. Emission Limitation:

PM_{10} emissions from emissions units P018 and P019, combined, shall not exceed 3.01 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of PM_{10}, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.37 lb PM_{10}/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

j. Emission Limitation:

PE from emissions units P018 and P019, combined, shall not exceed 7.33 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of PM, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.9 lb/ PE/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

k. Emission Limitation:

CO emissions from emissions units P018 and P019, combined, shall not exceed 76.54 tons per year.

Applicable Compliance Method:

Compliance with the CO pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

l. Emission Limitation:

NO_x emissions from emissions units P018 and P019, combined, shall not exceed 39.90 tons per year.

Applicable Compliance Method:

Compliance with the NO_x pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

m. Emission Limitation:

OC emissions from emissions units P018 and P019, combined, shall not exceed 119.29 tons per year.

Applicable Compliance Method:

Compliance with the OC pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

n. Emission Limitation:

SO_2 emissions from emissions units P018 and P019, combined, shall not exceed 1.63 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x V x H)/2000

where:

E = combined emission rate of SO_2, TPY, from P018 and P019;

EF = emission factor from landfill, assumed to be approximately 7.79 lb SO_2/1E6 dscf LF;

V = combined volume of LFG combusted per hour in P018 and P019, dscf/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

o. Emission Limitation:

VOC emissions from emissions units P018 and P019, combined, shall not exceed 5.54 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of VOC, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.68 lb lb VOC/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

p. Emission Limitation:

HCl emissions from emissions units P018 and P019, combined, shall not exceed 1.06 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of VOC, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.13 lb lb HCl/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

q. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

2. P019, IC Engine #16

Operations, Property and/or Equipment Description:

1400 bkW (14.0 mmBtu/hr) Deutz TBG 620 V16 K Internal Combustion Engine to produce electricity from landfill gas. NOTE: This was originally intended to be installed under PTI 02-16880; however, the allowable time to install expired. Therefore, this permit was applied for and a new emissions unit ID (P019) was assigned.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(10), d)(11), d)(12) and e)(4)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Visible particulate emissions shall not exceed 10% opacity as a 6-minute average. Carbon monoxide (CO) emissions shall not exceed 9.4 pounds per hour. Nitrogen oxide (NO_x) emissions shall not exceed 4.9 pounds per hour. Organic compound (OC) emissions shall not exceed 14.65 pounds per hour. Hydrogen chloride (HCl) emissions shall not exceed 0.13 pound per hour.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	Particulate emissions less than 10 microns in diameter (PM_{10}) shall not exceed 0.37 pound per hour. Particulate emissions (PE) shall not exceed 0.9 pound per hour. Sulfur dioxide (SO_2) emissions shall not exceed 0.23 pound per hour. Volatile organic compound (VOC) emissions shall not exceed 0.68 pound

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		per hour. See b)(2)d.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/2006	See b)(2)e.
d.	OAC rule 3745-31-05(D)(1)(a)	PM_{10} emissions from emissions units P018 and P019, combined, shall not exceed 3.01 tons per year. PE from emissions units P018 and P019, combined, shall not exceed 7.33 tons per year. CO emissions from emissions units P018 and P019, combined, shall not exceed 76.54 tons per year. NO_x emissions from emissions units P018 and P019, combined, shall not exceed 39.90 tons per year. OC emissions from emissions units P018 and P019, combined, shall not exceed 119.29 tons per year. SO_2 emissions from emissions units P018 and P019, combined, shall not exceed 1.63 tons per year. VOC emissions from emissions units P018 and P019, combined, shall not exceed 5.54 tons per year. HCl emissions from emissions units P018 and P019, combined, shall not exceed 1.06 tons per year. See b)(2)a and b)(2)c.
e.	OAC rule 3745-17-11(B)(5)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-18-06	The emission limitation required by this applicable rule is less stringent than the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	40 CFR Part 60, Subpart WWW	See b)(2)b.
i.	40 CFR Part 63, Subpart AAAA	See B.2.
j.	40 CFR Part 63, Subpart A	Table 1 of 40 CFR Part 63, Subpart AAAA provides a list of the General Provisions from 40 CFR 63.1 through 63.15 that are applicable to this emissions unit.

(2) Additional Terms and Conditions

a. The internal combustion engine shall operate using lean burn technology.

b. Collected landfill gas shall be treated for sale or additional use per 40 CFR 60.752(b)(2)(iii)(C) or shall be routed to a control system per 40 CFR 60.752(b)(2)(iii)(B). The control system shall be designed and operated to reduce the non-methane organic compound (NMOC) by 98 weight-percent or the outlet NMOC emissions shall be reduced to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

c. The maximum combined annual operating hours of P018 and P019 shall not exceed 16,285.7, based upon a rolling, 365-day summation of the operating hours.

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

e. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PM_{10}, PE, VOC and SO_2 from this air contaminant source since the calculated annual emission rates are each less than 10 tons per year.

c) Operational Restrictions

(1) The permittee shall burn only landfill gas as fuel in this emissions unit.

(2) The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

(3) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), the permittee has committed to compressing, filtering for particles up to 10 microns in diameter, and dewatering the landfill gas.

Dewatering shall be defined as a reduction of the dew point of the landfill gas by at least 20 degrees Fahrenheit.

(4) The allowable gas flow rate to the internal combustion engine's combustion chambers shall be determined during the most recent compliance test.

(5) When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), the minimum allowable average temperature of the internal combustion engine's combustion chambers, based on 3-hour blocks of time, shall not be lower than the minimum combustion temperature that was established during the most recent compliance test that demonstrated compliance with the applicable requirements.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving each emissions unit. The presence or absence of any visible emissions shall be noted in an operations log for each unit. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the cause of the visible emissions;

c. the total duration of any visible emissions incident; and

d. any corrective actions taken to eliminate the visible emissions.

(2) The permittee shall record the dates and times when the landfill gas is treated for sale or additional use and when the internal combustion engines are operated as landfill gas control devices.

(3) The permittee shall install, calibrate and maintain a continuous device that monitors and records the temperature of the landfill gas prior to dewatering and after dewatering. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(C), the temperature shall be monitored at all times.

(4) The permittee shall install, calibrate and maintain a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of +/- 1 percent of

the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater, for the exhaust of the internal combustion engines. When demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), the temperatures shall be monitored at all times.

(5) The permittee shall install, calibrate, and maintain a device that monitors and records gas flow to or bypass of the internal combustion engines. The gas flow rate measuring device shall record the flow to the control device at least every 15 minutes.

(6) When attempting to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(B), the permittee shall collect and record each day all 3-hour blocks of time during which the average combustion chamber temperature within the internal combustion engine was less than the allowable minimum operating temperature as established during the most recent compliance test.

(7) The permittee shall collect and record each day all 3-hour blocks of time during which the average landfill gas flow rate to the internal combustion engine exceeds the maximum allowable gas flow as established during the most recent compliance test.

(8) The permittee shall record each day when a fuel other than landfill gas was burned in this emissions unit.

(9) The permittee shall maintain daily records of the following information:

a. the operating hours for P018 and P019 each day;

b. the combined operating hours for P018 and P019 each day; and

c. the rolling, 365-day summation of the combined operating hours of P018 and P019.

(10) The PTI application for these emissions unit(s), P018 and P019, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: Hydrogen Chloride

Ceiling Value (ppm) : 5.0

Maximum Hourly Emission Rate (lbs/hr): 0.26

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.684

MAGLC (ug/m3): 57

The permittee, has demonstrated that emissions of Hydrogen chloride, from emissions unit(s) P018 and P019, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

(11) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(12) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. describe any corrective actions taken to eliminate the visible particulate emissions;

c. identify the date(s) and duration the gas flow rate to the internal combustion engine exceeded the maximum gas flow rate requirements, as established during the most recent compliance stack test, as a 3-hour average;

d. when demonstrating compliance with 40 CFR 60.752 (b)(2)(iii)(C), identify the date(s) and duration when the temperature difference of the landfill gas between pre-dewatering and post-dewatering is less than 20 degrees Fahrenheit;

e. when demonstrating compliance with 40 CFR 60.752(b)(2)(iii)(B), identify the date(s) and duration of each 3-hour block of time when the average temperature within the internal combustion engine did not meet the minimum temperature requirements; and

f. all exceedances of the rolling, 365-day restriction on the hours of combined operation for emissions units P018 and P019.

These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than landfill gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) Any breakdown or malfunction resulting in the emission of raw landfill gas emissions to the atmosphere shall be reported by phone to the Northeast District Office of Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and remedial measures shall be undertaken immediately to correct the problem and prevent further emissions to the atmosphere. A summary of the breakdown or malfunction, including the date(s) and time(s) and the measure(s) taken to correct the problem shall be included in the semi-annual deviation report.

(4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(5) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted in accordance with the facility-wide terms and conditions in B.2.e)(1) of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NO_x, CO, VOC and HCl.

c. Unless the permittee can demonstrate that all landfill gas burned in the internal combustion engines has been compressed, filtered for particulates up to 10 microns in diameter, and dewatered since the previous compliance test, the emission testing shall be conducted to demonstrate compliance with either the removal of 98 weight-percent of NMOC or the reduction of the outlet concentration of NMOC to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen. Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR 60.754(d).

d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

PE – Method 5 of 40 CFR Part 60, Appendix A;
NO_x - Method 7 or 7E of 40 CFR Part 60, Appendix A;
CO - Method 10 of 40 CFR Part 60, Appendix A;
HCl - Method 26 or 26A of 40 CFR Part 60, Appendix A; and
OC/VOC - Method 25 or 25A of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

f. During each test run the permittee shall monitor the operating temperature and the gas flow rate of the internal combustion engine’s combustion chambers in order to establish the minimum allowable operating temperature and the maximum allowable gas flow rate as referenced in c)(4), c)(5), d)(6) and d)(7).

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

h. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

(2) Compliance with the emission limitations established in this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

PM_{10} emissions shall not exceed 0.37 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 51, Appendix M, Method 201.

b. Emission Limitation:

PE shall not exceed 0.9 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5.

c. Emission Limitation:

CO emissions shall not exceed 9.4 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10.

d. Emission Limitation:

NO_x emissions shall not exceed 4.9 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

e. Emission Limitation:

OC emissions shall not exceed 14.65 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25C.

f. Emission Limitation:

SO_2 emissions shall not exceed 0.23 pound per hour.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

g. Emission Limitation:

VOC emissions shall not exceed 0.68 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25C.

h. Emission Limitation:

HCl emissions shall not exceed 0.13 pound per hour.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 26 or 26A.

i. Emission Limitation:

PM_{10} emissions from emissions units P018 and P019, combined, shall not exceed 3.01 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of PM_{10}, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.37 lb PM_{10}/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

j. Emission Limitation:

PE from emissions units P018 and P019, combined, shall not exceed 7.33 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of PM, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.9 lb/ PE/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

k. Emission Limitation:

CO emissions from emissions units P018 and P019, combined, shall not exceed 76.54 tons per year.

Applicable Compliance Method:

Compliance with the CO pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

l. Emission Limitation:

NO_x emissions from emissions units P018 and P019, combined, shall not exceed 39.90 tons per year.

Applicable Compliance Method:

Compliance with the NO_x pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

m. Emission Limitation:

OC emissions from emissions units P018 and P019, combined, shall not exceed 119.29 tons per year.

Applicable Compliance Method:

Compliance with the OC pound per hour mass emission rate limitation and the combined operating hour restriction is sufficient to demonstrate compliance.

n. Emission Limitation:

SO_2 emissions from emissions units P018 and P019, combined, shall not exceed 1.63 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x V x H)/2000

where:

E = combined emission rate of SO_2, TPY, from P018 and P019;

EF = emission factor from landfill, assumed to be approximately 7.79 lb SO_2/1E6 dscf LF;

V = combined volume of LFG combusted per hour in P018 and P019, dscf/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

o. Emission Limitation:

VOC emissions from emissions units P018 and P019, combined, shall not exceed 5.54 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of VOC, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.68 lb lb VOC/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

p. Emission Limitation:

HCl emissions from emissions units P018 and P019, combined, shall not exceed 1.06 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

E = (EF x H)/2000

where:

E = combined emission rate of VOC, TPY, from P018 and P019;

EF = emission factor from manufacturer, 0.13 lb lb HCl/hr;

H = combined operating hours of P018 and P019, hrs; and

2000 = conversion factor, pounds per ton.

q. Emission Limitation:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.