State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

7/18/2008

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No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

James Hiendlmayr
Bio-Gas Technologies, LTD
1 Continental Way
Norwalk, OH 44857

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0322000295
Permit Number: 03-17396
Permit Type: Initial installation
County: Erie

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

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 DAPC, Northwest District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Bio-Gas Technologies, LTD

Facility ID: 0322000295
Permit Number: 03-17396
Permit Type: Initial installation
Issued: 7/18/2008
Effective: 7/18/2008

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Bio-Gas Technologies, LTD

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Authorization

Facility ID: 0322000295
Facility Description: Electric Services
Application Number(s): A0003843
Permit Number: 03-17396
Permit Description: (2) 13.9 mmBTU/hr landfill gas-fired generator.
Permit Type: Initial installation
Permit Fee: $400.00
Issue Date: 7/18/2008
Effective Date: 7/18/2008

This document constitutes issuance to:

Bio-Gas Technologies, LTD
10102 Hoover Road
Milan, OH 44846

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, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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: 03-17396
Permit Description: (2) 13.9 mmBTU/hr landfill gas-fired generator.

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

Emissions Unit ID:	**P001**
Company Equipment ID:	13.9 mmBtu/hr LFG fired IC engine/generator #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	13.9 mmBtu/hr LFG fired IC engine/generator #2
Superseded Permit Number:	
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 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, Northwest 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, Northwest 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, Northwest 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, Northwest 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, Northwest 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, Northwest 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, Northwest 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 through completion of the annual PER covering the last period of operation 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 PER 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 PER, 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 Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

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. This facility is subject to 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in 40 CFR Part 63, Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63 Subpart ZZZZ and Subpart A. The MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

3. This facility is subject to 40 CFR Part 60, Subpart JJJJ, New Source Performance Standards: Stationary Spark Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart JJJJ. The permittee shall also comply with all applicable requirements of 40 CFR Part 60, Subpart A (General Provisions) as identified in Table 3 of 40 CFR Part 63, Subpart JJJJ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 60 Subpart JJJJ and Subpart A. The NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

C. Emissions Unit Terms and Conditions

1. P001, 13.9 mmBtu/hr LFG fired IC engine/generator #1

Operations, Property and/or Equipment Description:

13.9 mmBtu/hr LFG fired IC engine/generator #1

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) None.

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)	5.90 lbs Nitrogen oxides (NOx)/hr, 25.8 tons NO_x/yr 14.76 lbs Carbon monoxide (CO)/hr, 64.7 tons CO/yr 4.92 tons of Volatile organic compounds (VOC)/hr, 21.6 tons VOC/yr See b)(2)a., b)(2)b., 1.f), and g)(1)
b.	OAC rule 3745-31-05(A)(3)(b)	See b)(2)a.
c.	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb of particulate emissions (PE) per mmBtu actual heat input
d.	OAC rule 3745-17-07 (A)(1)	Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule
e.	OAC rule 3745-18-06(G)	0.5 lb Sulfur dioxide (SO2) per mmBtu actual heat input
f.	OAC rule 3745-110-03(F)(2)	See b)(2)f.
g.	OAC rule 3745-23-06(B)	See b)(2)e.
h.	OAC rule 3745-21-08(B)	See b)(2)e.
i.	40 CFR Part 60, Subpart JJJJ	See b)(2)f. and g)(2)
j.	40 CFR Part 63, Subpart ZZZZ	See b)(2)c.
k.	40 CFR Part 60, Subpart WWW	None, see b)(2)d.
l.	ORC 3704.03(F) OAC rule 3745-114-01	None, see g)(3)

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) control requirement for this emissions unit has been determined to be the use of "lean burn technology". BAT requirements also include compliance with the terms and conditions of this permit.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO2 and PM10 emissions from this air contaminant source since the uncontrolled potential to emit for SO2 and PM10 are each less than ten tons per year.

The PTE for SO2 for this emissions unit is 6.92 tons per year and was determined by assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

The PTE for PM10 for this emissions unit is 2.93 tons per year and was determined by multiplying manufacturer's test data (0.048 lb/mmBtu), a maximum heat input of 13.9 mmBtu/hr, a maximum operating schedule of 8,760 hr/yr and dividing by 2000 lbs/ton.

b. The requirements of this rule also includes compliance with the requirements of OAC rule 3745-17-07 (A)(1), and OAC rule 3745-17-11(B)(5)(b). This rule also includes compliance with the Compliance Requirements of 40 CFR Part 60 Subpart JJJJ [see g)(2)]. It should be noted that the emission limitations of OAC rule 3745-31-05(A)(3) are more stringent that the emission limitations established pursuant to 40 CFR Part 60 Subpart JJJJ (see b)(2)f.].

c. Pursuant to 40 CFR Part 63.6590(c), this emissions unit must meet the requirements of 40 CFR Subpart JJJJ to be in compliance with 40 CFR Part 63, Subpart ZZZZ. No other requirements under 40 CFR Part 63, Subpart ZZZZ apply to this emissions unit.

d. This emissions unit receives landfill gas from the Erie County Sanitary Landfill which is not subject to the control requirements in 40 CFR Part 60, Subpart WWW. Therefore no control requirements under 40 CFR Part 60, Subpart WWW apply to this emissions unit.

e. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 revisions to OAC rule 3745-21-08, the

requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) [see b)(2)b.].

c) Operational Restrictions

(1) This emissions unit shall burn only landfill gas.

(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 the internal combustion engine is not operating, the landfill gas shall be diverted to the existing flare at the Erie County Landfill or to an internal combustion engine that is operating.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

(1) 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.

(2) Any breakdown or malfunction resulting in the emission of raw landfill gas to the atmosphere shall be reported to the Northwest District Office of the Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.

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 within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for VOC, Methods 1 through 4 and Method 18, 25, 25a or 25c, as applicable, of 40 CFR, Part 60, Appendix A, including any additional

requirements as specified by 40 CFR Part 60, Subpart JJJJ. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, NWDO.

e. 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, NWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

f. Personnel from the Ohio EPA 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.

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

(2) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

5.90 lbs NOx/hr, 25.8 tons NOx/yr

14.76 lbs CO/hr, 64.7 tons CO/yr

4.92 lbs VOC/hr, 21.6 tons VOC/yr

<u>Applicable Compliance Method</u>:

Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition A.V.1. The annual emission limitations were developed by multiplying the respective hourly emission limitations by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitations, compliance with the annual limitations will be assumed.

b. <u>Emission Limitation</u>:

0.062 lb PE/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.048 lb PE/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by manufacturer's emission testing data.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.5 lb SO2/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.1137 lb SO2/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

The potential to emit for SO2 was determined assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 – 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule

Applicable Compliance Method:

If required, compliance with the visible PE limitations shall be demonstrated determined in accordance with OAC Rule 3745-17-03(B)(6).

g) Miscellaneous Requirements

(1) The permittee shall incorporate “Good Engineering Practices” with regards to the design of the stack height on this emissions unit. For this permit determination, a stack with a minimum height that meets or exceeds the maximum height of any nearby hill or other structure shall meet the “Good Engineering Practice” requirements.

(2) This emissions unit shall meet the applicable requirements pursuant to 40 CFR Part 60.4243 of Subpart JJJJ Part 60 - Compliance Requirements for Owners and Operators.

(3) Modeling to demonstrate compliance with, the AToxic Air Contaminant Statute@, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit=s maximum annual

emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

2. P002, 13.9 mmBtu/hr LFG fired IC engine/generator #2

Operations, Property and/or Equipment Description:

13.9 mmBtu/hr LFG fired IC engine/generator #2

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) None.

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)	5.90 lbs Nitrogen oxides (NOx)/hr, 25.8 tons NO_x/yr 14.76 lbs Carbon monoxide (CO)/hr, 64.7 tons CO/yr 4.92 tons of Volatile organic compounds (VOC)/hr, 21.6 tons VOC/yr See b)(2)a., b)(2)b., and g)(1)
b.	OAC rule 3745-31-05(A)(3)(b)	See b)(2)a.
c.	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb of particulate emissions (PE) per mmBtu actual heat input
d.	OAC rule 3745-17-07 (A)(1)	Visible PE shall not exceed 20% opacity, as a six minute average, except as provided by rule
e.	OAC rule 3745-18-06(G)	0.5 lb Sulfur dioxide (SO2) per mmBtu actual heat input
f.	OAC rule 3745-110-03(F)(2)	See b)(2)f.
f.	OAC rule 3745-23-06(B)	See b)(2)e.
g.	OAC rule 3745-21-08(B)	See b)(2)e.
h.	40 CFR Part 60, Subpart JJJJ	See b)(2)f. and g)(2)
i.	40 CFR Part 63, Subpart ZZZZ	See b)(2)c.
j.	40 CFR Part 60, Subpart WWW	None, see b)(2)d.
k.	ORC 3704.03(F) OAC rule 3745-114-01	None, see g)(3)

(2) Additional Terms and Conditions

a. The "Best Available Technology" (BAT) control requirement for this emissions unit has been determined to be the use of "lean burn technology". BAT requirements also include compliance with the terms and conditions of this permit.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO2 and PM10 emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for SO2 and PM10 are each less than ten tons per year.

The PTE for SO2 for this emissions unit is 6.92 tons per year and was determined by assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

The PTE for PM10 for this emissions unit is 2.93 tons per year and was determined by multiplying manufacturer's test data (0.048 lb/mmBtu), a maximum heat input of 13.9 mmBtu/hr, a maximum operating schedule of 8,760 hr/yr and dividing by 2000 lbs/ton.

b. The requirements of this rule also includes compliance with the requirements of OAC rule 3745-17-07 (A)(1), and OAC rule 3745-17-11(B)(5)(b). This rule also include compliance with the Compliance Requirements of 40 CFR Part 60 Subpart JJJJ [see g)(2)]. It should be noted that the emission limitations of OAC rule 3745-31-05(A)(3) are more stringent that the emission limitations established pursuant to 40 CFR Part 60 Subpart JJJJ (see b)(2)f.].

c. Pursuant to 40 CFR Part 63.6590(c), this emissions unit must meet the requirements of 40 CFR Subpart JJJJ to be in compliance with 40 CFR Part 63, Subpart ZZZZ. No other requirements under 40 CFR Part 63, Subpart ZZZZ apply to this emissions unit.

d. This emissions unit receives landfill gas from the Erie County Sanitary Landfill which is not subject to the control requirements in 40 CFR Part 60, Subpart WWW. Therefore no control requirements under 40 CFR Part 60, Subpart WWW apply to this emissions unit.

e. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the 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 revisions to OAC rule 3745-21-08, the

requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) [see b)(2)b.].

c) Operational Restrictions

(1) This emissions unit shall burn only landfill gas.

(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 the internal combustion engine is not operating, the landfill gas shall be diverted to the existing flare at the Erie County Landfill or to an internal combustion engine that is operating.

d) Monitoring and/or Recordkeeping Requirements

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

e) Reporting Requirements

(1) 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.

(2) Any breakdown or malfunction resulting in the emission of raw landfill gas to the atmosphere shall be reported to the Northwest District Office of the Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.

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 within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

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

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO_x, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for VOC, Methods 1 through 4 and Method 18, 25, 25a or 25c, as applicable of 40 CFR, Part 60, Appendix A, including any additional

requirements as specified by 40 CFR Part 60, Subpart JJJJ. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at its maximum capacity unless otherwise specified or approved by the Ohio EPA, NWDO.

e. 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, NWDO. 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 tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA's refusal to accept the results of the emission tests.

f. Personnel from the Ohio EPA 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.

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

(2) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

5.90 lbs NO_x/hr, 25.8 tons NO_x/yr

14.76 lbs CO/hr, 64.7 tons CO/yr

4.92 lbs VOC/hr, 21.6 tons VOC/yr

<u>Applicable Compliance Method</u>:

Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition A.V.1. The annual emission limitations were developed by multiplying the respective hourly emission limitations by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitations, compliance with the annual limitations will be assumed.

b. <u>Emission Limitation</u>:

0.062 lb PE/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.048 lb PE/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*Potential to emit for this emissions unit was established by manufacturer's emission testing data.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

0.5 lb SO2/mmBtu actual heat input

Applicable Compliance Method:

The potential to emit* for this emissions unit is 0.1137 lb SO2/mmBtu and complies with the lb/mmBtu emission limitation. Therefore no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

The potential to emit for SO2 was determined assuming the total sulfur content in the landfill gas is converted to SO2. The sulfur concentration in the landfill gas was determined by the method outlined in AP-42 section 2.4.4.2.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 – 4 and 6 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as specified by rule

Applicable Compliance Method:

If required, compliance with the visible PE limitations shall be demonstrated determined in accordance with OAC Rule 3745-17-03(B)(6).

g) Miscellaneous Requirements

(1) The permittee shall incorporate “Good Engineering Practices” with regards to the design of the stack height on this emissions unit. For this permit determination, a stack with a minimum height that meets or exceeds the maximum height of any nearby hill or other structure shall meet the “Good Engineering Practice” requirements.

(2) This emissions unit shall meet the applicable requirements pursuant to 40 CFR Part 60.4243 of Subpart JJJJ Part 60 - Compliance Requirements for Owners and Operators.

(3) Modeling to demonstrate compliance with, the AToxic Air Contaminant Statute@, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit=s maximum annual

emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.