State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL
OTTAWA COUNTY
Application No: 03-16007

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
WWW	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 10/16/2003

BioEnergy LLC
Leslie Cook
7700 San Felipe Suite 480
Houston, TX 77063

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging 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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: **USEPA** **NWDO**

FINAL PERMIT TO INSTALL 03-16007

Application Number:	03-16007
APS Premise Number:	0362010127
Permit Fee:	**$400**
Name of Facility:	BioEnergy LLC
Person to Contact:	Leslie Cook
Address:	7700 San Felipe Suite 480 Houston, TX 77063

Location of proposed air contaminant source(s) [emissions unit(s)]:
530 North Camp Road
Port Clinton, Ohio

Description of proposed emissions unit(s):
1400 bkW internal combustion engine.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described 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

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install General Terms and Conditions

1. 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:

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

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. 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:

i. Reports of any required monitoring and/or record keeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping 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 appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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.

iv. 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.

2. 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 appropriate Ohio EPA District Office or local air agency 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).

3. 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.

4. 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.

5. Severability Clause

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.

6. 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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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.

7. 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 this Permit To Install.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. 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.

b. 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:

i. 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.

ii. 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.

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

iv. 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.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency 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:

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

ii. 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.

10. Permit To Operate Application

a. If 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 <u>obtained before</u> 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).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. 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.

B. State Only Enforceable Permit To Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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 record keeping 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 appropriate Ohio EPA District Office or local air agency. 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., 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.)

3. Permit Transfers

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

4. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

5. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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.

6. 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.

7. 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).

8. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
NO_x	76.8
CO	128.4
OC	9.0
SO_2	2.7
PE	11.4

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - 1400 bKW landfill gas fired engine - (Administrative Modification to PTI # 03-13060, issued 12/21/98 to reflect the true maximum capacity of the emissions unit)	OAC rule 3745-31-05 (A)(3)	5.84 lbs oxides of nitrogen (NO_x)/hr, 25.6 tons NO_x/yr 9.76 lbs carbon monoxide (CO)/hr, 42.8 tons CO/yr 0.68 lb organic compounds (OC)/hr; 3.0 tons OC/yr 0.20 lb sulfur dioxide (SO_2)/hr, 0.9 ton SO_2/yr 3.8 tons particulate emissions (PE)/yr Visible PE shall not exceed 10% opacity as a six-minute average See A.I.2.a., A.I.2.b.
	40 CFR Part 60, Subpart WWW	Control Requirements, see A.I.2.c.
	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb PE/mmBtu actual heat input
	OAC rule 3745-17-07 (A)(1)	A.I.2.d.
	OAC rule 3745-18-06(G)	A.I.2.e.
	OAC rule 3745-23-06(B)	A.I.2.f.
	OAC rule 3745-21-08(B)	A.I.2.f.

2. Additional Terms and Conditions

2.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.

2.b The requirements of this rule also include compliance with the applicable requirements of 40 CFR Part 60, Subpart WWW and OAC rule 3745-17-11(B)(5)(b).

2.c Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

2.d The visible emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

2.e This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.f 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.

2.g The PE limitations are inclusive of and assumed to be PM_{10}.

II. 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 Ottawa County Landfill or to an internal combustion engine that is operating.

4. The average combustion chamber temperature within the internal combustion engine, for any 3-hour block of time when the emissions unit is in operation, shall be less than the minimum temperature established during the initial compliance test.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion chamber temperature within the internal combustion engine. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. 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 temperature established during the initial compliance test.

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time which the average combustion chamber temperature within the internal combustion engine does not comply with the temperature limitation specified above.

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 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.

4. The excursion reports required above are due by the dates described in the General Terms and Conditions of this permit.

V. 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, SO_2*, OC, and 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.

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 SO_2, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for OC (including the removal efficiency), Methods 1 through 4 and Method 18, 25, 25a or 25c of 40 CFR, Part 60, Appendix A, including any additional requirements as specified by 40 CFR Part 60, Subpart WWW. 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 of 14.0 mmBtu/hr, 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.

* In lieu of performance testing, the permittee may sample the sulfur content of the fuel to demonstrate compliance with the allowable mass emission rate.

2. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
5.84 lbs NO_x/hr, 25.6 tons NO_x/yr
9.76 lbs CO/hr, 42.8 tons CO/yr
0.68 lb OC/hr; 3.0 tons OC/yr
0.20 lb SO_2/hr, 0.9 ton SO_2/yr

Applicable Compliance Method:
Compliance with the respective 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 limitation 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. Emission Limitation:
0.062 lb PE/mmBtu actual heat input, 3.8 tons PE/yr

Applicable Compliance Method: The lbs/Btu emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly 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 and permittees' emission testing data.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual limitation was established by multiplying the hourly emission limitation by a maximum operating schedule of 8,760 hours per year and dividing by 2000 lbs/ton. Therefore provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation will be assumed.

c. Emission Limitation:
Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

Applicable Compliance Method:
Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition A.V.1.

d. Emission Limitation:
Visible PE shall not exceed 10% opacity, as a six-minute average

Applicable Compliance Method:
If required, compliance with the visible PE limitations shall be determined in accordance with the test methods and procedures in Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - 1400 bKW landfill gas fired engine - (Administrative Modification to PTI # 03-13060, issued 12/21/98 to reflect the true maximum capacity of the emissions unit)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - 1400 bKW landfill gas fired engine - (Administrative Modification to PTI # 03-13060, issued 12/21/98 to reflect the true maximum capacity of the emissions unit)	OAC rule 3745-31-05 (A)(3)	5.84 lbs oxides of nitrogen (NO_x)/hr, 25.6 tons NO_x/yr 9.76 lbs carbon monoxide (CO)/hr, 42.8 tons CO/yr 0.68 lb organic compounds (OC)/hr; 3.0 tons OC/yr 0.20 lb sulfur dioxide (SO_2)/hr, 0.9 ton SO_2/yr 3.8 tons particulate emissions (PE)/yr Visible PE shall not exceed 10% opacity as a six-minute average See A.I.2.a., A.I.2.b.
	40 CFR Part 60, Subpart WWW	Control Requirements, see A.I.2.c.
	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb PE/mmBtu actual heat input
	OAC rule 3745-17-07 (A)(1)	A.I.2.d.
	OAC rule 3745-18-06(G)	A.I.2.e.
	OAC rule 3745-23-06(B)	A.I.2.f.
	OAC rule 3745-21-08(B)	A.I.2.f.

2. Additional Terms and Conditions

2.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.

2.b The requirements of this rule also include compliance with the applicable requirements of 40 CFR Part 60, Subpart WWW and OAC rule 3745-17-11(B)(5)(b).

2.c Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

2.d The visible emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

2.e This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.f 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.

2.g The PE limitations are inclusive of and assumed to be PM_{10}.

II. 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 Ottawa County Landfill or to an internal combustion engine that is operating.

4. The average combustion chamber temperature within the internal combustion engine, for any 3-hour block of time when the emissions unit is in operation, shall be less than the minimum temperature established during the initial compliance test.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion chamber temperature within the internal combustion engine. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. 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 temperature established during the initial compliance test.

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time which the average combustion chamber temperature within the internal combustion engine does not comply with the temperature limitation specified above.

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 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.

4. The excursion reports required above are due by the dates described in the General Terms and Conditions of this permit.

V. 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, SO_2*, OC, and 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.

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 SO_2, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for OC (including the removal efficiency), Methods 1 through 4 and Method 18, 25, 25a or 25c of 40 CFR, Part 60, Appendix A, including any additional requirements as specified by 40 CFR Part 60, Subpart WWW. 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 of 14.0 mmBtu/hr, 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.

* In lieu of performance testing, the permittee may sample the sulfur content of the fuel to demonstrate compliance with the allowable mass emission rate.

2. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

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

5.84 lbs NO_x/hr, 25.6 tons NO_x/yr
9.76 lbs CO/hr, 42.8 tons CO/yr
0.68 lb OC/hr; 3.0 tons OC/yr
0.20 lb SO_2/hr, 0.9 ton SO_2/yr

Applicable Compliance Method:
Compliance with the respective 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 limitation 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. Emission Limitation:
0.062 lb PE/mmBtu actual heat input, 3.8 tons PE/yr

Applicable Compliance Method: The lbs/Btu emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly 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 and permittees' emission testing data.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual limitation was established by multiplying the hourly emission limitation by a maximum operating schedule of 8,760 hours per year and dividing by 2000 lbs/ton. Therefore provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation will be assumed.

c. Emission Limitation:
Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

Applicable Compliance Method:
Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition A.V.1.

d. Emission Limitation:
Visible PE shall not exceed 10% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitations shall be determined in accordance with the test methods and procedures in Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 -1400 bKW landfill gas fired engine - (Administrative Modification to PTI # 03-13060, issued 12/21/98 to reflect the true maximum capacity of the emissions unit)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - 1400 bKW landfill gas fired engine - (new emissions unit)	OAC rule 3745-31-05 (A)(3)	5.84 lbs oxides of nitrogen (NO_x)/hr, 25.6 tons NO_x/yr 9.76 lbs carbon monoxide (CO)/hr, 42.8 tons CO/yr 0.68 lb organic compounds (OC)/hr; 3.0 tons OC/yr 0.20 lb sulfur dioxide (SO_2)/hr, 0.9 ton SO_2/yr 3.8 tons particulate emissions (PE)/yr Visible PE shall not exceed 10% opacity as a six-minute average See A.I.2.a., A.I.2.b.
	40 CFR Part 60, Subpart WWW	Control Requirements, see A.I.2.c.
	OAC rule 3745-17-11 (B)(5)(b)	0.062 lb PE/mmBtu actual heat input
	OAC rule 3745-17-07 (A)(1)	A.I.2.d.
	OAC rule 3745-18-06(G)	A.I.2.e.
	OAC rule 3745-23-06(B)	A.I.2.f.
	OAC rule 3745-21-08(B)	A.I.2.f.

2. Additional Terms and Conditions

2.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.

2.b The requirements of this rule also include compliance with the applicable requirements of 40 CFR Part 60, Subpart WWW and OAC rule 3745-17-11(B)(5)(b).

2.c Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

2.d The visible emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).

2.e This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

2.f 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.

2.g The PE limitations are inclusive of and assumed to be PM_{10}.

II. 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 Ottawa County Landfill or to an internal combustion engine that is operating.

4. The average combustion chamber temperature within the internal combustion engine, for any 3-hour block of time when the emissions unit is in operation, shall be less than the minimum temperature established during the initial compliance test.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion chamber temperature within the internal combustion engine. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. 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 temperature established during the initial compliance test.

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time which the average combustion chamber temperature within the internal combustion engine does not comply with the temperature limitation specified above.

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 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.

4. The excursion reports required above are due by the dates described in the General Terms and Conditions of this permit.

V. 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, SO_2*, OC, and 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.

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 SO_2, Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for OC (including the removal efficiency), Methods 1 through 4 and Method 18, 25, 25a or 25c of 40 CFR, Part 60, Appendix A, including any additional requirements as specified by 40 CFR Part 60, Subpart WWW. 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 of 14.0 mmBtu/hr, 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.

* In lieu of performance testing, the permittee may sample the sulfur content of the fuel to demonstrate compliance with the allowable mass emission rate.

2. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

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

5.84 lbs NO_x/hr, 25.6 tons NO_x/yr
9.76 lbs CO/hr, 42.8 tons CO/yr
0.68 lb OC/hr; 3.0 tons OC/yr
0.20 lb SO_2/hr, 0.9 ton SO_2/yr

Applicable Compliance Method:
Compliance with the respective 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 limitation 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. Emission Limitation:
0.062 lb PE/mmBtu actual heat input, 3.8 tons PE/yr

Applicable Compliance Method: The lbs/Btu emission limitation represents the potential to emit* for this emissions unit. Therefore no hourly 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 and permittees' emission testing data.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A.

The annual limitation was established by multiplying the hourly emission limitation by a maximum operating schedule of 8,760 hours per year and dividing by 2000 lbs/ton. Therefore provided compliance is demonstrated with the hourly limitation, compliance with the annual limitation will be assumed.

c. Emission Limitation:
Non-methane organic compound (NMOC) emissions shall be reduced by 98 weight percent or reduce the outlet NMOC emissions to less than 20 parts per million by volume, dry basis (ppmvd) as hexane at 3 percent oxygen.

Applicable Compliance Method:
Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition A.V.1.

d. Emission Limitation:
Visible PE shall not exceed 10% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitations shall be determined in accordance with the test methods and procedures in Method 9 of 40 CFR Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - 1400 bKW lanfill gas fired engine (new emissions unit)		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 03-16007 Facility ID: 0362010127

FACILITY NAME BioEnergy LLC

FACILITY DESCRIPTION 1400 bkW internal combustion engine CITY/TWP Port Clinton

SIC CODE 4911 SCC CODE 2-02-001-02 EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 1400 bKW landfill gas fired engine

DATE INSTALLED 1/99

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.062lbs/MMBtu	3.8	0.062lbs/MMBtu	3.8
PM_{10}					
Sulfur Dioxide		0.2	0.9	0.2	0.9
Organic Compounds		0.68	3.0	0.68	3.0
Nitrogen Oxides		5.84	25.6	5.84	25.6
Carbon Monoxide		9.76	42.8	9.76	42.8
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? WWW NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $ N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 03-16007 Facility ID: 0362010127

FACILITY NAME BioEnergy LLC

FACILITY DESCRIPTION 1400 bkW internal combustion engine CITY/TWP Port Clinton

SIC CODE 4911 SCC CODE 2-02-001-02 EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 1400 bKW lanfill gas fired engine

DATE INSTALLED 1/99

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.062lbs/MMBtu	3.8	0.062lbs/MMBtu	3.8
PM_{10}					
Sulfur Dioxide		0.2	0.9	0.2	0.9
Organic Compounds		0.68	3.0	0.68	3.0
Nitrogen Oxides		5.84	25.6	5.84	25.6
Carbon Monoxide		9.76	42.8	9.76	42.8
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? WWW NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $ N/A

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

NEW SOURCE REVIEW FORM B

PTI Number: 03-16007 Facility ID: 0362010127

FACILITY NAME BioEnergy LLC

FACILITY DESCRIPTION 1400 bkW internal combustion engine CITY/TWP Port Clinton

SIC CODE 4911 SCC CODE 2-02-001-02 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION 1400 bKW lanfill gas fired engine

DATE INSTALLED 12/03

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.062lbs/MMBtu	3.8	0.062lbs/MMBtu	3.8
PM_{10}					
Sulfur Dioxide		0.2	0.9	0.2	0.9
Organic Compounds		0.68	3.0	0.68	3.0
Nitrogen Oxides		5.84	25.6	5.84	25.6
Carbon Monoxide		9.76	42.8	9.76	42.8
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? WWW NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Enter Determination

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? N

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $ n/a

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaiminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? _____ YES X NO

IDENTIFY THE AIR CONTAMINANTS: _____

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