



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
ERIE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 03-16197

Fac ID: 0322010254

DATE: 9/26/2006

Erie County Sanitary Landfill
Travis Bayes
2674 Federated Boulevard
Columbus, OH 43235

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

NWDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 03-16197

Application Number: 03-16197
Facility ID: 0322010254
Permit Fee: **\$200**
Name of Facility: Erie County Sanitary Landfill
Person to Contact: Travis Bayes
Address: 2674 Federated Boulevard
Columbus, OH 43235

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10102 Hoover Road
Huron, Ohio**

Description of proposed emissions unit(s):
Municipal solid waste landfill with a flare.

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 Recordkeeping 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 recordkeeping 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 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 appropriate Ohio EPA District Office or local air agency. 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 B.9 below if no deviations occurred during the quarter.

- iii. 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 appropriate Ohio EPA District Office or local air agency 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.
 - iv. If this permit is for an emissions unit located at a Title V facility, then 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.

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 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.

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

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 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. 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 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).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit 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.

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

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.

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

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.

2. 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 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 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 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 (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.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing 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 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)

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.

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

Erie County Sanitary Landfill
 PTI Application: 03-16197
 Issued: 9/26/2006

Facility ID: 0322010254

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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 Federally Enforceable 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., postmarked), 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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
NMOC (passive/fugitive)	6.89
methane (passive/fugitive)	5613.41
NMOC (flare)	0.15
methane (flare)	128.93
SO ₂	3.20
NO _x	17.08
CO	92.86
PE	4.69

13

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

Erie County Sanitary Landfill
PTI Application: 03-16197
Issued: 9/26/2006

Facility ID: 0322010254

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

1. Based on the Landfill Gas Emission Model (LandGEM), Erie County Sanitary Landfill will not exceed an emission rate of 50 megagrams per year of NMOC for the duration of the life of the landfill. Therefore, based on the current capacity and annual waste acceptance rate, the permittee will not trigger the requirements of 40 CFR Part 60, Subpart WWW to collect and control the landfill gas. However, the permittee is proposing to install an active gas collection system with an open flare for the primary purpose of distributing landfill gas to off-site facilities where the landfill gas will be combusted to generate heat and/or electricity.

During time periods when the permittee is under contract to provide landfill gas to off-site facilities, Erie County Sanitary Landfill, will operate under the terms and conditions provided for in this permit, PTI #03-16197, for emissions unit P901. However, during time periods when the permittee is not actively collecting landfill gas, Erie County Sanitary Landfill will operate under the terms and conditions provided for in PTI #03-13576, for emissions unit F002.

2. The permittee shall maintain daily records that identify whether the landfill is operating with an active gas collection system with control (active system) or as a passive venting system without control (passive system).
3. The permittee shall submit annual reports that summarize (a) the time periods when the landfill was operated as an active system and (b) the time periods when the landfill was operated as a passive system. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>
P901 - municipal solid waste landfill with active and passive gas collection, open flare, and associated fugitive dust operations	<p>OAC rule 3745-31-05 (A)(3)</p> <p>OAC rule 3745-17-07 (B)</p> <p>OAC rule 3745-17-08 (B)</p> <p>40 CFR Part 60, Subpart WWW</p> <p>40 CFR, Part 63, Subpart AAAA</p>

Erie C**PTI A****Issued: 9/26/2006**

Emissions Unit ID: P901

<u>Applicable Emissions Limitations/Control Measures</u>	methane/year (See A.I.2.i.)
best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.b through A.I.2.e.)	21.20 pounds carbon monoxide (CO)/hour; 92.86 tons CO/year
There shall be no visible fugitive PE from fugitive dust operations/sources (See A.I.2.b.)	3.90 pounds nitrogen oxides (NO _x)/hour; 17.08 tons NO _x /year
landfill gas control requirements (See A.I.2.j.)	0.73 pound sulfur dioxide (SO ₂)/hour; 3.20 tons SO ₂ /year
<u>Passive/Fugitive Emissions:</u>	1.07 lbs of particulate matter less than 10 microns (PM ₁₀)/hour; 4.69 tons of PM ₁₀ /year (See A.I.2.f.)
6.89 tons nonmethane organic compounds (NMOC)/year (See A.I.2.i.)	Opacity restrictions (See A.I.2.I.i.)
5613.41 tons methane/year (See A.I.2.i.)	See A.I.2.g.
<u>Flare Emissions:</u> 0.034 pound NMOC/hour; 0.15 ton NMOC/year (See A.I.2.i.)	See A.I.2.h.
28.258 pounds methane/hour; 123.77 tons	See A.I.2.a.
	not applicable (See A.I.2.t.)

2. Additional Terms and Conditions

- 2.a** The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05 (A)(3). 40 CFR Part 60, Subpart WWW requires the collection and control of landfill gas within 30 months after an annual NMOC report contains an emission rate which equals or exceeds 50 megagrams per year. OAC rule 3745-31-05 (A)(3) is more stringent and requires collection and control of landfill gas prior to an annual NMOC report containing an emission rate which equals or exceeds 50 megagrams per year (See A.1.2.k).
- 2.b** The landfill fugitive dust operations/sources that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:
- i. waste dumping/unloading;
 - ii. waste compaction;
 - iii. soil excavation and handling; and
 - iv. wind erosion from landfill surfaces and stockpiles.
- 2.c** The permittee shall employ best available control measures for the above-identified landfill fugitive dust operations/sources for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee maintains that the inherent moisture content of the materials involved in fugitive dust operations/sources is at a level which will result in negligible fugitive dust emissions and is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available control measures to ensure compliance.
- 2.d** Best available control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of best available control measure(s) shall continue during the operation of the fugitive dust operation/sources until further observation confirms that use of the control measure(s) is unnecessary.

Emissions Unit ID: P901

- 2.e** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 (A)(3).
- 2.f** All particulate emissions from the flare are PM₁₀.
- 2.g** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07 (B) pursuant to OAC rule 3745-17-07 (B)(11)(e).
- 2.h** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08 (A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08 (B).
- 2.i** This permit establishes federally enforceable limitations on NMOC and methane for the purpose of having the emission rates (fugitive/passive and flare) resulting from the requirements of this permit to collect and control landfill gas represent the potential to emit of the emissions unit. The limitations and control requirements shall be established through OAC rule 3745-31-05 (A)(3).
- 2.j** The permittee shall install a collection and control system for gas generated within the landfill which meets the requirements specified in Sections A.I.2.k through A.I.2.n, A.II.1 through A.II.6, and A.III.1 through A.III.9.
- 2.k** The active gas collection system shall satisfy the following requirements, as specified in 40 CFR Part 60.752 (b)(2)(ii)(A):

 - i. The system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.
 - ii. The system shall collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active, or 2 years or more if closed or at final grade.
 - iii. The system shall collect gas at a sufficient extraction rate.
 - iv. The system shall be designed to minimize off-site migration of subsurface gas.
- 2.l** Except as provided in A.I.2.m, any collected gas shall be vented to an open flare designed and operated as follows:

 - i. The flare shall be designed for and operated with no visible emissions,

except for periods of time not to exceed a total of 5 minutes during any 2 consecutive hours.

- ii. The flare shall be operated with a flame present at all times.
- iii. The permittee shall comply with either the requirements in paragraphs (a) and (b) or the requirements in paragraph (c):
 - (a) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 BTU/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 BTU/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined as follows:

where

Ht = net heating value of the sample, MJ/scm; where the net enthalpy per mole of off-gas is based on combustion at 25°C and 760 mmHg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

K = constant, 1.740×10^{-7} (1/ppm)(g mole/scm)(MJ/kcal)
where the standard temperature for (g mole/scm) is 20°C;

Ci = concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77; and

Hi = net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mmHg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in 40 CFR Part 60.17) if published values are not available or cannot be calculated.

- (b) A steam-assisted and non-assisted flare shall be designed for and operated with an exit velocity of less than 18.3 m/sec (60 ft/sec), except:

Emissions Unit ID: P901

- (i) steam-assisted and non-assisted flares designed for and operated with an exit velocity equal to or greater than 18.3 m/sec but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 BTU/scf); and
- (ii) steam-assisted and non-assisted flares designed for and operated with an exit velocity of less than the velocity, V_{max} , and less than 122 m/sec (400 ft/sec) are allowed, as determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (HT + 28.8)/31.7$$

where

V_{max} = maximum permitted velocity, M/sec

28.8 = constant

31.7 = constant

HT = net heating value as determined in section A.1.2.1.iii(a) above

- (iii) Flares shall be used that have a diameter of 3 inches or greater, are non-assisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max} , as determined by the following equation:

$$V_{max} = (X_{H_2} - K_1) * K_2$$

where

V_{max} = maximum permitted velocity, m/sec

K_1 = constant, 6.0 volume-percent hydrogen

K_2 = constant, 3.9(m/sec)/volume-percent hydrogen

X_{H_2} = volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77.

- (c) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the following equation:

$$V_{max} = 8.706 + 0.7084 (HT)$$

where

V_{max} = maximum permitted velocity, m/sec

8.706 = constant

0.7084 = constant

HT = net heating value as determined in section A.1.2.1.iii(a)
above

2.m All collected gas shall comply with at least one of the following requirements (See A.VI.5.):

- i. The collected gas may be routed to a flare designed and operated in accordance with the requirements specified in Section A.1.2.1.

AND/OR

- ii. The collected gas may be routed to a control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

AND/OR

- iii. The collected gas may be routed to any number of destinations, which are not under the common control of the permittee, where landfill gas, which has not been processed by a treatment system (see A.II.7), is used in an enclosed combustion device to generate heat and/or electricity. The enclosed combustion device must be designed and operated to comply with the requirements of A.1.2.m.ii. The requirements of A.1.2.m.ii, or control efficiency requirements deemed to be either equivalent or more stringent, must be contained in an effective permit issued to the owner/operator of the enclosed combustion device prior to the combustion of any

"untreated" landfill gas. The permit issued to the owner/operator of the enclosed combustion device must also contain all applicable monitoring, record keeping, reporting, and testing requirements. The distribution of collected landfill gas to an entity not under the common control of the permittee and not in compliance with the requirements outlined above is prohibited.

AND/OR

- iv. The collected gas may be routed to a treatment system that processes the collected gas for subsequent sale or use (see A.II.7). All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of A.I.2.m.i or A.I.2.m.ii.
- 2.n** The collection and control system may be capped or removed provided that all of the following conditions are met, as specified in 40 CFR Part 60.752 (b)(2)(v):
- i. The landfill should no longer be accepting solid waste and be permanently closed, pursuant to 40 CFR Part 60.258.60.
 - ii. The collection and control system shall have been in operation a minimum of 15 years.
 - iii. The calculated NMOC gas produced by the landfill shall be less than 55 tons per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
- 2.o** This facility shall not accept for disposal any NESHAP Regulated Asbestos Containing Material (RACM) as defined in the NESHAP for Asbestos, 40 CFR Part 61, Subpart M, section 141 amended November 20, 1990 or any subsequent revisions. This regulation defines RACM as "(a) Friable asbestos material, (b) Category I nonfriable asbestos containing material that has become friable, (c) Category I nonfriable asbestos containing material that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable asbestos containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation

operations regulated by this subpart."

- 2.p** In addition, this facility shall not accept for disposal any Category II nonfriable asbestos containing material.
- 2.q** For asbestos materials, this facility shall be limited to accepting Category I nonfriable asbestos containing material that have not or will not be subjected to sanding, grinding, cutting or abrading.
- 2.r** The facility shall ensure that any Category I nonfriable asbestos containing material which has not or will not be subjected to sanding, grinding, cutting, or abrading shall not become friable during processing at the landfill. Any asbestos containing material that is or becomes friable is subject to the NESHAPS regulation cited in Condition A.I.2.n.
- 2.s** All terms from Conditions A.I.2.p through A.I.2.r are defined as in 40 CFR 61.141, amended November 20, 1990, or any subsequent revisions.
- 2.t** Erie County Sanitary Landfill does not meet the criteria in 40 CFR 63.1935 to make the facility subject 40 CFR Part 63, Subpart AAAA.

II. Operational Restrictions

- 1. The permittee shall operate the collection system with negative pressure at each well except under the following conditions:
 - a. a fire or increased well temperature (the permittee shall record instances when positive pressure occurs in efforts to avoid a fire);
 - b. use of a geomembrane or synthetic cover (the permittee shall develop acceptable pressure limits in the design plan); and
 - c. a decommissioned well (A well may experience a static positive pressure after shutdown to accommodate for declining flows. All design changes shall be approved by the Northwest District Office).
- 2. The permittee shall operate each interior well in the collection system with a landfill gas temperature less than 55 degrees Celsius and with either a nitrogen level less than 20% or an oxygen level less than 5%. If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Northwest District

Office.

The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

3. The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. For exceedances, refer to section A.III.2.d.
4. The permittee shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with Conditions A.I.2.k and A.I.2.l. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.
5. The permittee shall operate the flare at all times when the collected gas is routed to the system.
6. A pilot flame shall be maintained at all times in the flare's pilot burner, or a fail-close valve shall be installed to cease gas flow to the flare when there is no flame present.
7. Any collected landfill gas routed to a treatment system that processes the gas for subsequent sale or use shall meet the requirements contained in USEPA's proposed definition of a "treatment system" contained in a May 23, 2002 Federal Register Notice of proposed rule making [67 FR 36480].

III. Monitoring and/or Recordkeeping Requirements

1. For the active gas collection system, the permittee shall install a sampling port for each well and record the following information on a monthly basis:
 - a. the gauge pressure in the gas collection header at each individual well;
 - b. the nitrogen or oxygen concentration in the landfill gas; and
 - c. the temperature of the landfill gas.
2. The permittee shall monitor surface concentrations of methane on a quarterly basis as

Emissions Unit ID: P901

follows:

- a. The surface concentrations of methane shall be monitored along the entire perimeter of the collection area and along a serpentine pattern spaced 30 meters apart (or a site-specific established spacing) for each collection area.
- b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
- c. Surface emission monitoring shall be performed in accordance with section 4.3.1 or Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirement listed in Section A.II.3:
 - i. The location of each monitored exceedance shall be marked and the location recorded.
 - ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored within 10 calendar days of detecting the exceedance.
 - iii. If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the remonitoring shows a third exceedance for the same location, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes, or control device, and a corresponding time line for installation may be submitted to the Ohio EPA for approval. No further monitoring of that location is required until the action specified has been taken.
 - iv. Any location that initially showed an exceedance but has methane concentration less than 500 ppm methane above background at the 10-day remonitoring specified above shall be remonitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the

1-month remonitoring shows an exceedance, the actions specified above shall be taken.

3. The permittee shall install, calibrate, maintain, and operate the following equipment in accordance with the manufacturer's specifications:
 - a. a heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame; and
 - b. a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes.
4. If a gas flow rate measuring device is not installed, than the permittee shall secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
5. The permittee shall maintain the following information for the life of the control equipment as measured during the initial performance test or compliance demonstration:
 - a. the maximum expected gas generation flow rate as calculated based on the following:
 - i. For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR(e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year
 L_o = methane generation potential, cubic meters per megagram solid waste
 R = average annual acceptance rate, megagrams per year
 k = methane generation rate constant, year⁻¹
 t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less (if the equipment is installed after closure, t is

Emissions Unit ID: P901

the age of the landfill at installation, years)

c = time since closure, years (for an active landfill $c = 0$ and $e^{-kc} = 1$)

- ii. For sites with known year-to-year solid waste acceptance rate:

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, per year

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the i^{th} section, megagrams

t_i = age of the i^{th} section, years

- iii. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in Sections A.III.5.a.i and A.III.5.a.ii. If the landfill is still accepting waste, the actual measure flow data will not equal the maximum expected gas generation rate, so calculations using the equations in Sections A.III.5.a.i or A.III.5.a.ii or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. The permittee may use another method to determine the maximum gas generation flow rate if the method has been approved by the Ohio EPA.

- b. the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR Part 60.759 (a)(1);
- c. the flare type (i.e., steam-assisted, air-assisted, or non-assisted);
- d. all visible emission readings;
- e. heat content determinations of the gas;
- f. flow rate or bypass flow rate measurements;
- g. exit velocity determinations made during the performance test as specified in 40 CFR Part 60.18; and
- h. continuous records of the flare flame monitoring and all periods of operation during which the flare flame is absent.

6. The permittee shall properly install, operate, and maintain a device to continuously monitor the flare flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. In addition, the permittee shall record the following information each day:
 - a. all periods of time during which there was no flame; and
 - b. the downtime for the flare and monitoring equipment when the collection and control systems are in operation.
7. The permittee shall maintain, for the life of the collection system, an up-to-date, readily accessible, plot map showing each existing and planned collector in the system and providing a unique identification location for each collector.
8. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of (a) the maximum design capacity of the landfill, (b) the current amount of solid waste in place, and (c) the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either hard copy or electronic formats are acceptable. These records may also be required by the Ohio EPA, Division of Solid and Infectious Waste Management, and shall satisfy this permit condition.
9. The permittee shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.
10. Except as otherwise provided in this section, the permittee shall perform inspections of the landfill fugitive dust operations/sources in accordance with the following frequencies:

Emissions Unit ID: P901

<u>landfill fugitive dust operations/sources</u>	<u>minimum inspection frequency</u>
waste dumping/unloading operation	once during each day of
waste compaction operation	once during each day of
soil excavation and handling operation	once during each day of
wind erosion from landfill surfaces and stockpiles operation	once during each day of

11. The purpose of the inspections is to determine the need for implementing best available control measures for particulate emissions. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for a landfill fugitive dust operation/source that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next inspection is within one week.
12. The permittee may, upon receipt of written approval from the Northwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
13. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in (d) shall be kept separately for each landfill fugitive dust operation/source identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. Any breakdown or malfunction of the landfill gas collection and control system resulting in the emission of raw landfill gas to the atmosphere shall be reported to the Northwest District Office within one hour after the occurrence, or as soon as reasonably possible,

and immediate remedial measures shall be undertaken to correct the problem and to prevent further emissions to the atmosphere.

2. The permittee shall submit a closure report to the Northwest District Office within 30 days of waste acceptance cessation. The Ohio EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR Part 258.60. If a closure report has been submitted to the Ohio EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 CFR Part 60.7 (a)(4).
3. The permittee shall submit an equipment removal report to the Northwest District Office 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in 40 CFR Part 60.757 (e)(1). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752 (b)(2)(v) have been met.
4. The permittee shall submit annual reports of the recorded information below:
 - a. value and length of time for any exceedance(s) the of applicable parameters contained in Sections A.II.1, A.II.2, and A.II.5;
 - b. description and duration of all periods when the gas stream is not vented to off-site facilities and is diverted from the control device (flare) through a bypass line or the indication of bypass flow;
 - c. description and duration of all periods when the control device (flare) was not operating for a period exceeding 1 hour and length of time the control device was not operating;
 - d. all periods of time when the collection system was not operating in excess of 5 days;
 - e. location of each exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month;
 - f. date of installation and location of each well or collection system expansion added pursuant to 40 CFR Part 60.755 (a)(3), (b), and (c)(4).

These reports shall be submitted by January 31 of each year and shall cover the

previous calendar year.

5. The permittee shall submit the following information with the initial performance test report required pursuant to 40 CFR Part 60.8:
 - a. a diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;
 - b. the data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;
 - c. the documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;
 - d. the sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;
 - e. the provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and
 - f. the provisions for the control of off-site migration.
6. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure that was to be implemented as a result of an inspection was not implemented.

V. Testing Requirements

1. Compliance with the emission limitation(s) specified in Section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following method(s):
 - a. Emission Limitations:

Emissions Unit ID: P901

6.89 tons passive/fugitive NMOC/year (emissions not captured by the collection and control system)

5613.41 tons passive/fugitive methane/year (emissions not captured by the collection and control system)

Applicable Compliance Method:

The permittee may demonstrate compliance with the above emission limitations using the Landfill Gas Emission Model (LandGEM). Based on the results of the model, maximum potential emissions will occur in the year 2036 and are based on the following:

- i. 2.391 x 10⁶ Mg refuse in place (2004);
- ii. annual waste acceptance rate of 90,910 Mg per year (100,000 tons per year);
- iii. the following maximum waste capacities:

<u>Landfill Unit</u>	<u>Waste Capacity (Mg)</u>
South Unit	1.285 x 10 ⁶
BAT Unit	3.372 x 10 ⁶
Closed Unit	1.009 x 10 ⁶

- iv. the following landfill gas collection system capture efficiencies, based on engineering design;

<u>Landfill Unit</u>	<u>Capture Efficiency</u>
South Unit	70%
BAT Unit	52.5%
Closed Unit	not vented to flare

The annual limitations represent the maximum potentials to emit, therefore no recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with the above limitations.

- b. Emission Limitations: Flare Emissions
0.034 pound NMOC/hour and 0.15 ton NMOC/year

28.258 pounds methane/hour and 123.77 tons methane/year

Applicable Compliance Method:

The permittee may demonstrate compliance with the above emission limitations using the Landfill Gas Emission Model (LandGEM). Based on the results of the model, maximum emissions will occur in the year 2036 and are based on the following:

- i. 2.391×10^6 Mg refuse in place (2004);
- ii. annual waste acceptance rate of 90,910 Mg per year (100,000 tons per year);
- iii. the following maximum waste capacities:

<u>Landfill Unit</u>	<u>Waste Capacity (Mg)</u>
South Unit	1.285×10^6
BAT Unit	3.372×10^6
Closed Unit	1.009×10^6

- iv. the following landfill gas collection system capture efficiencies, based on engineering design;

<u>Landfill Unit</u>	<u>Capture Efficiency</u>
South Unit	70%
BAT Unit	52.5%
Closed Unit	not vented to flare

- v. applying a 98% control efficiency from the flare for the control of NMOC and methane emissions; and
 - vi. a maximum operating schedule of 8,760 hours/year.
- c. Emission Limitation: Flare Emissions
 21.20 pounds CO/hour and 92.86 tons CO/year

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by multiplying the appropriate emission factor from AP-42, Table 13.5.1 (1/95) of 0.37 lb CO/mmBtu by a flare capacity of 57.3 mmBtu/hour.

The annual emission limitation was developed by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hours/year, and then

Emissions Unit ID: P901

dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

- d. Emission Limitation: Flare Emissions
3.90 pounds NO_x/hour and 17.08 tons NO_x/year

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by multiplying the appropriate emission factor from AP-42, Table 13.5.1 (1/95) of 0.068 lb NO_x/mmBtu by a flare capacity of 57.3 mmBtu/hour.

The annual emission limitation was developed by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

- e. Emission Limitation: Flare Emissions
0.73 pound SO₂/hour and 3.20 tons SO₂/year

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by calculating emissions using a combination of the hydrogen sulfide (30 ppmv) and carbonyl sulfide (15 ppmv) concentrations (from laboratory analysis), a landfill gas generation rate of 1660 scfm, and assuming that 100% of the sulfur content is converted to SO₂.

The annual emission limitation was developed by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

- f. Emission Limitation: Flare Emissions
1.07 pounds PM₁₀/hour and 4.69 tons PM₁₀/year

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly emission limitation by multiplying the appropriate emission factor from AP-42, Table 2.4.5 (11/98) of 17.0 lbs PE/10⁶ dscf methane by a landfill gas generation rate of 1660 scfm, 0.63 cubic foot methane/cubic foot of landfill gas, and 60 minutes/hour.

The annual emission limitation was developed by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hours/year, and then

dividing by 2000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

- g. Emission Limitation:
There shall be no visible fugitive PE from fugitive dust operations/sources.

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- h. Emission Limitation:
There shall be no visible emissions from the flare, except for periods of time not to exceed a total of 5 minutes during any two consecutive hours.

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

1. There shall be no open burning in violation of Ohio Administrative Code rule 3745-19 at this facility.
2. Authority to Enter:

Pursuant to the authority of OAC rule 3745-77-07 (C)(2) or ORC section 3704.03 (L), any representative of the Director may, upon presentation of proper identification, enter at any reasonable time upon any portion of the property where this landfill is located, including any improvements thereon, to make inspections, take samples, conduct tests, and examine records or reports pertaining to any emissions of air contaminants and any monitoring equipment, emissions control equipment, or methods. No operator or agent of this landfill shall act in any manner to refuse, hinder, or thwart this legal right of entry.
3. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR Part 60 are also federally enforceable.
4. The permittee is intending to collect and distribute landfill gas to off-site facilities where the gas will be combusted to generate heat and/or electricity. Prior to distributing any landfill gas off-site, the permittee shall obtain approval from the Northwest District Office. The permittee shall submit a notification to the Northwest District Office indicating the intent to distribute landfill gas off-site and identify the gas receiving facilities. Any gas that is collected for the purpose off-site distribution must meet the requirements specified in Sections A.I.2.m.ii, and/or A.I.2.m.iii, and/or A.I.2.m.iv.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P901 - municipal solid waste landfill with active and passive gas collection, open flare, and associated fugitive dust operations		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

38

Erie C

PTI A

Issued: 9/26/2006

Emissions Unit ID: P901

None