State of Ohio Environmental Protection Agency

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

TELE: (614) 644-3020 FAX: (614) 644-3184
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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

12/11/2008

Certified Mail
Facility ID: 0322010254
Permit Number: P0086947
County: Erie

Fred Dubbert
Erie County Sanitary Landfill
10102 Hoover Rd.
Milan, OH 44846

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Initial

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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

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

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

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northwest District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Title V Permit to Control Air Pollution
OAC Chapter 3745-77

Erie County Sanitary Landfill

Facility ID: 0322010254
Permit Number: P0086947
Permit Type: Initial
Issued: 12/11/2008
Effective: 1/1/2009
Expiration: 1/1/2014

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Title V Permit to Control Air Pollution
OAC Chapter 3745-77
Erie County Sanitary Landfill

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Authorization

Facility ID: 0322010254
Facility Description: Municipal Solid Waste Landfill.
Application Number(s): A0017822, A0017823
Permit Number: P0086947
Permit Description: Renewal Application
Permit Type: Initial
Issue Date: 12/11/2008
Effective Date: 1/1/2009
Expiration Date: 1/1/2014
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Erie County Sanitary Landfill
10102 Hoover Rd.
Milan, OH 44846

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

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northwest District Office.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. 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.
(Authority for term: OAC rule 3745-77-07(A)(5))

6. 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.
(Authority for term: OAC rule 3745-77-07(A)(6))

7. 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, in accordance with Standard Term and Condition A.11 below. 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee

shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.
(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. 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.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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:

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

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

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

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

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:

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

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

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the

Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as

soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. 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.
(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from 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, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

25. Records Retention Requirements Under State Law Only

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.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports

pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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 verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.
(Authority for term: OAC rule 3745-77-07(C))

27. 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 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. 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 emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.
(Authority for term: OAC rule 3745-77-01(C))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

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

   a) None.

2. Based on the Landfill Gas Emission Model (LandGEM), this facility (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.

3. During time periods when the permittee is under contract to provide landfill gas to off-site facilities, this facility will operate under the terms and conditions provided for in emissions unit P901. However, during time periods when the permittee is not actively collecting landfill gas, this facility will operate under the terms and conditions provided for in emissions unit F002.

4. 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).

5. 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.

6. There are no insignificant emissions units listed by the applicant for this facility.

C. Emissions Unit Terms and Conditions

1. F001, Plant roadways and parking areas

Operations, Property and/or Equipment Description:

Landfill Roadways and Parking Areas

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 03-13576 issued July 2, 2002)	1.53 tons fugitive particulate emissions (PE) /yr
b.	OAC rule 3745-17-07(B)(1)	See b)(2)j
c.	OAC rule 3745-17-08(B)(1)	See b)(2)k
d.	OAC rule 3745-31-05(A)(3) (PTI 03-13576 issued July 2, 2002) paved roadways and parking areas [see b)(2)a]	no visible particulate emissions (PE), except for a period of time not to exceed one minute during any 60-minute observation period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [see b)(2)c, and b)(2)e through b)(2)i]
e.	OAC rule 3745-31-05(A)(3) (PTI 03-13576 issued July 2, 2002) unpaved roadways and parking areas [see b)(2)b]	no visible PE, except for a period of time not to exceed three minutes during any 60-minute observation period best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [see b)(2)d through b)(2)i]

(2) Additional Terms and Conditions

a. The paved roadways that are subject to the terms and conditions of this permit are listed below:

paved roadways: all paved road segments

paved parking areas: all paved parking areas

b. The unpaved roadways and parking areas that are subject to the terms and conditions of this permit are listed below:

unpaved roadways: all unpaved road segments

unpaved parking areas: all unpaved parking areas

c. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

d. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

e. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

f. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

g. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

h. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

i. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

j. 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).

k. The 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)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
All	Once per day of operation

unpaved roadways and parking areas	minimum inspection frequency
All	Once per day of operation

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area 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 required inspection is within one week.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

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

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in (3)d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify the following:

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.

The permittee shall submit these reports in accordance with the General Terms and Conditions of this permit.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitation:
1.53 tons/yr fugitive PE

Applicable Compliance Method:
The emission limitation was established by applying a 95% control efficiency for use of best available control measure(s) to maximum potential uncontrolled emission rates of 0.04 TPY for paved roadways and parking areas and 30.58 TPY for unpaved roadways and parking areas. Maximum potential uncontrolled emission rates for paved roadways and parking areas were calculated by multiplying an emission factor of 0.02 lb per vehicle mile traveled [AP-42, section 13.2.1.2 (10/97)] by a maximum annual vehicle miles traveled of 3,600 and dividing by 2000 lbs per ton. Maximum potential uncontrolled emission rates for unpaved roadways and parking areas were calculated by multiplying an emission factor of 1.11 lbs [AP-42, section 13.2.2.2 (10/98)] per vehicle mile traveled by a maximum annual vehicle miles traveled of 55,100 and dividing by 2000 lbs per ton.

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed.

b. Emission Limitation:
no visible PE, except for a period of time not to exceed one minute during any 60-minute observation period for paved roadways and parking areas

Applicable Compliance Method:
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.

c. Emission Limitation:
no visible PE, except for a period of time not to exceed three minutes during any 60-minute observation period for unpaved roadways and parking areas

Applicable Compliance Method:
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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

[All of Section f): OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. F002, Landfill Operations - Passive

Operations, Property and/or Equipment Description:

Municipal Solid Waste Landfill (passive gas collection scenario - see also Part B – Facility-wide Terms and Conditions)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 03-17102 issued May 4, 2006)	55.0 tons of fugitive nonmethane organic compounds (NMOC)/year 21,100 tons of fugitive methane/year 29.4 tons of fugitive particulate emissions (PE)/year Visible fugitive PE shall not exceed 20% opacity as a three-minute average Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)k through b)(2)n]
b.	40 CFR 60.750 et seq. (NSPS Subpart WWW)	See b)(2)a, b)(2)b, b)(2)j, and d) through f).
c.	40 CFR 63.1930 et seq. (MACT Subpart AAAA)	None [See Section b)(2)h]
d.	OAC rule 3745-17-07(B)(1)	None [See Section b)(2)i]
e.	OAC rule 3745-17-08(B)	None [See Section b)(2)j]

(2) Additional Terms and Conditions

a. The permittee (owner or operator), for the MSW landfill having a design capacity greater than 2.5 million cubic meters by volume or 2.5 million megagrams by mass, shall calculate the landfill nonmethane organic compounds (NMOC) emission rate annually or may elect to calculate and submit an estimate of the annual NMOC emission rate for the next 5-year period, in lieu of an annual

report; and if the estimated NMOC emission rate can be documented to be less than 50 megagrams for each of the next five consecutive years. The estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for the next 5 years. The NMOC emissions for each year shall be calculated using the procedures and appropriate equation contained in this permit [and 40 CFR 60.754(a)]. The landfill NMOC emissions can be calculated in 1, 2 or 3 Tiers as follows:

i. Tier 1: the NMOC emissions are calculated using the appropriate formula and the default values from 40 CFR 60.754(a)(1);

ii. Tier 2: the NMOC emissions are calculated, using the appropriate formula from 40 CFR 60.754(a)(1), using the site specific NMOC concentration (instead of the default value), obtained through the sampling procedures specified in 40 CFR 60.754(a)(3), using either Method 25C or Method 18 of Part 60 appendix A;

iii. Tier 3: the NMOC emissions are calculated, using the appropriate formula from 40 CFR 60.754(a)(1), using the site-specific methane generation rate constant, k, determined as required in 40 CFR 60.754(a)(4), using Method 2E of Part 60 appendix A, and the site-specific NMOC concentration determined from the sampling in Tier 2, 40 CFR 60.754(a)(3).

If the actual waste acceptance rate exceeds the estimated acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the director (the Ohio EPA, Northwest District Office). The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate, or the reporting frequency shall be changed to annual.

The initial 5-year NMOC emissions report shall be submitted to the director by January 31st, following the first year in which the landfill design capacity exceeded 2.5 million cubic meters by volume or 2.5 million megagrams by mass, and shall cover the preceding calendar year and the 5 consecutive years that follow. The NMOC emissions report shall be submitted by January 31st every 5 years, until a collection and control system is installed in compliance with 60.752(b)(2) and operating in accordance with 40 CFR 60.753 and 60.755.
[40 CFR 60.752(b), 60.754(a), & 60.757(b)]

b. As long as the calculated NMOC emission rate is calculated to be less than 50 megagrams per year the permittee shall:

i. submit the initial 5-year NMOC emission rate report and either annual or 5-year emission reports thereafter; and

ii. recalculate the NMOC emission rate following the fifth year and every 5 years thereafter, using the procedures and calculation specified in 40 CFR 60.754(a) and contained in the testing section of this permit.

If Tier 2 is used to calculate the estimated annual NMOC emissions, the site-specific NMOC concentration shall be re-tested every 5 years, as required in 40 CFR 60.754(a)(3).

If Tier 3 is used to calculate the estimated annual NMOC emissions, the initial/original site-specific methane generation rate constant shall be used in all future annual NMOC emission calculations and reports.

The NMOC emissions report shall be submitted by January 31st every 5 years (unless reverting to annually), until such time a collection and control system is installed in compliance with 60.752(b)(2) and operated in accordance with 40 CFR 60.753 and 60.755, or the landfill is closed.

Unless other arrangements are made with the director, the permittee shall submit a permit to install (PTI) application with the first annual report where the calculated NMOC emissions exceed 50 megagrams per year, in order to permit the facility for the collection and control system(s) required by the Standards of Performance for Municipal Solid Waste Landfills, Subpart WWW.
[40 CFR 60.752(b)]

c. The facility shall not accept for disposal any regulated asbestos containing material (RACM) as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR Part 61, Subpart M, Section 141 and OAC rule 3745-20, or any subsequent revisions to either rule. RACM is defined to include:

   i. friable asbestos material;

   ii. Category I non-friable asbestos containing material that has become friable;

   iii. Category I non-friable asbestos containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or

   iv. Category II non-friable 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.

   In addition, this facility shall not accept any Category II non-friable asbestos-containing material. For asbestos materials, the permittee shall be limited to accepting Category I non-friable asbestos containing material that has not or will not be subjected to sanding, grinding, cutting, or abrading. The permittee shall ensure that any Category I non-friable 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 asbestos NESHAP regulation.
   [40 CFR Part 61, Subpart M & OAC 3745-20]

d. If any asbestos material arrives at the landfill from an unregulated residence and meets the description of RACM as described in b)(2)c, the landfill shall:

i. cause or permit no visible emissions to the outside air from the asbestos-containing waste materials during on-site transportation, transfer, deposition or compacting operations;

ii. assure that deposition and burial operations be conducted in a manner which prevents handling by equipment or persons that causes asbestos-containing waste materials to be broken-up or dispersed before the materials are buried;

iii. cover the asbestos-containing waste material with at least twelve inches of non-asbestos-containing material, as soon as practicable after deposition, but no later than at the end of the operating day; and

iv. assure that during the unloading, deposition, burial and initial compaction of asbestos-containing waste materials, the disposal site is restricted adequately to deter unauthorized entry of the general public and any unauthorized personnel to within one hundred feet of the operations.

[40 CFR Part 61, Subpart M & OAC 3745-20]

e. There shall be no open burning, in violation of OAC Chapter 3745-19, at this facility.
[OAC 3745-19]

f. Pursuant to the authority in 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; examine records or reports pertaining to any emissions of air contaminants; and inspect monitoring equipment, emissions control equipment, and/or methods of operation and gas sampling. No operator or agent of this landfill shall act in any manner to refuse, hinder, or thwart this legal right of entry.
[ORC section 3704.03(L)]

g. The permittee shall submit a permit to install (PTI) modification application and be issued a new PTI, before and where an expansion or an increase in the waste material received increases the NMOC emissions to equal or exceed 50 megagrams/year. If the amended design capacity report is not submitted with the PTI application, the permittee shall submit an amended design capacity report to the director within 90 days of the increase in the maximum design capacity of the landfill.
[40 CFR 60.752(a) & 60.757(a)]

h. This facility is not subject to 40 CFR Part 63, Subpart AAAA, pursuant to 40 CFR 63.1935.

i. 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).

j. The 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)(1).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep for at least 5 years, up-to-date, readily accessible, on-site records of the design capacity report which showed the landfill capacity to equal or exceed 2.5 million megagrams and/or 2.5 million cubic meters, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either hardcopy or electronic formats are acceptable.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.758(a)]

(2) The permittee shall maintain records of the total volume of material received each day. These records shall be maintained for a period of not less than three years, and the records shall be available for review by the director or his representative during normal business hours.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(3) This solid waste landfill has a design capacity greater than 2.5 million megagrams or 2.5 million cubic meters; therefore, the permittee shall calculate the NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754(a)(1) and this permit, and shall maintain records of such calculations. Except as provided in 60.757(b)(1)(ii) (where NMOC emissions can be calculated to be less than 50 megagrams in each of the next 5 consecutive years), the NMOC emission rate shall be re-calculated and reported annually.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.752(b)(2)]

(4) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing and/or nondegradable wastes, excluded from collection as provided in 40 CFR 60.759(a)(3)(i), as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.758(d)(2)]

e) Reporting Requirements

(1) Until a collection and control system is installed, meeting the requirements of 40 CFR 60.753 and 60.755, the permittee shall submit an annual NMOC emission rate report to the director, except for the provisions for the "5-year" estimate below. The director may request such additional information as may be necessary to verify the reported NMOC emission rate.

a. The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate, calculated using the formula from 40 CFR 60.754(a), also contained in this permit:

i. The initial NMOC emission rate report may be combined with the initial design capacity report. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for below.

ii. If the estimated NMOC emission rate as reported in the annual report to the director is less than 50 megagrams per year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the director. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the director. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

b. The permittee is exempted from the requirements of submitting the annual or 5-year NMOC emission estimate report, following the installation of a collection and control system meeting the requirements of 40 CFR 60.753 and 60.755 (or other option under 40 CFR 60.752(b)(2)(iii)), or when the landfill is closed.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.757(b)]

(2) Unless otherwise approved by the director, the permittee shall submit a PTI application along with the first NMOC emissions report in which the emission rate exceeds 50 megagrams per year; and a collection and control system design plan, if applicable, shall be submitted within 1 year of the first NMOC emissions report in which the emission rate exceeds 50 megagrams per year, except as follows:

a. If the permittee elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis, as provided in 40 CFR 60.754(a)(3), and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the re-calculated emission rate based on NMOC sampling and analysis, shall be submitted to the director within 180 days of the first calculated emission rate exceeding 50 megagrams per year.

b. If the permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 megagrams per year, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance of 50 megagrams per year. The revised NMOC emission rate report, based on the provisions of 40 CFR 754(a)(4) and the resulting site-specific methane generation rate constant (k), shall be submitted to the director within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.757(c)]

(3) The permittee shall submit a closure report to the Division of Air Pollution Control at the appropriate Ohio EPA office of jurisdiction, within 30 days of waste acceptance cessation. Permanent closure shall be conducted in accordance with the requirements of 40 CFR 258.60; and the Ohio EPA may request additional information, as may be necessary, to verify that all of these conditions are met. 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 60.7(a)(4).
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.757(d)]

(4) Pursuant to the New Source Performance Standards (NSPS), the source owner/operator is hereby advised of the requirements to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. actual start-up date (within 15 days after such date); and
c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:
Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
P.O. Box 1049
Columbus, OH 43216-1049

and

Ohio EPA, Northwest District Office
347 North Dunbridge Road
Bowling Green, Ohio 43402
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

f) Testing Requirements

(1) The permittee shall calculate the NMOC emission rate using either the equation provided in 40 CFR 60.754(a)(1)(i) or the equation provided in 40 CFR 60.754(a)(1)(ii), and specified below. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in 40 CFR 60.754(a)(1)(i), for part of the life of the landfill. The default values to be used in both equations are 0.05 per year for "k", unless a site-specific methane generation rate constant is determined as specified in a Tier 3 determination; 170 cubic meters per megagram for " L0"; and 4,000 ppm by volume as hexane for "CNMOC", unless samples are collected and the actual NMOC concentration is determined, as specified in a Tier 2 determination.

a. The following equation shall be used if the actual year-to-year solid waste acceptance rate is known:

$M_{nmoc} = \sum$ (i = 1 to n) of $2(k)(L_o)(M_i)(e^{(-kt_i)})(C_{nmoc})(3.6 \times 10^{-9})$

where,

M_{nmoc} = Total NMOC emission rate from the landfill, megagrams per year
k = methane generation rate constant, $year^{-1}$
L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams
t_i = age of the ith section, years
C_{nmoc} = concentration of NMOC, parts per million by volume as hexane
3.6×10^{-9} = conversion factor
n = number of sections

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill, when calculating the value for Mi, if documentation of the nature and amount of such wastes is maintained.

b. The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown:

$$M_{nmoc} = 2(L_o)(R)[(e^{-kc} - e^{-kt}](C_{nmoc})(3.6 \times 10^{-9})$$

Where:

M_{nmoc} = mass emission rate of NMOC, megagrams 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 landfill, years
C_{nmoc} = concentration of NMOC, parts per million by volume as hexane
c = time since closure, years; for active landfill c=0 and e^{-kc}=1
3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(a)(1)]

(2) The permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year. If the calculated NMOC emission rate is calculated to be less than 50 megagrams per year, then the permittee shall submit an emission rate report as required in 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually and submit the report to the director, as required under 40 CFR 60.752(b)(1) and as provided in this permit.

If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the permittee shall submit, within one year, a collection and control system design plan, prepared by a professional engineer, and shall install it in compliance with 40 CFR 60.752(b)(2); or shall determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in a Tier 2 determination, in 40 CFR 60.754(a)(3).
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(a)(2)]

(3) For a Tier 2 determination of the NMOC emission rate, the permittee shall determine the NMOC concentration using the following sampling procedure:

a. The permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than

25 hectares in area, only 50 sample probes are required. The sample probes should be located to avoid known areas of nondegradable solid waste.

b. The permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of Appendix A of 40 CFR Part 60. Method 18 of Appendix A of 40 CFR Part 60 may be used to analyze the samples collected by the Method 25 or 25C sampling procedure.

c. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter, unless evidence can be provided to substantiate the accuracy of smaller volumes. The compositing shall be terminated before the cylinder approaches ambient pressure where measurement accuracy diminishes.

d. If using Method 18, the permittee must identify all compounds in the sample, and, at a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. At a minimum, the instrument must be calibrated for each of the compounds on the list. The concentration of each Method 18 compound shall be converted to CNMOC as hexane by multiplying it by the ratio of its carbon atoms divided by six.

e. The permittee shall also divide the NMOC concentration determined from Method 25 or 25C of Appendix A of 40 CR Part 60 by six, to convert from CNMOC as carbon to CNMOC as hexane.

f. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes, provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

g. If more than the required number of samples is taken, all samples must be used in the analysis.

h. The permittee shall recalculate the NMOC mass emission rate using the average NMOC concentration from the collected samples instead of the default value.

i. If the resulting mass emission rate, recalculated using the site-specific NMOC concentration, is equal to or greater than 50 megagrams per year, the permittee shall either:

   i. comply with 40 CFR 60.752(b)(2) and submit, within one year, a collection and control system design plan, and install the system within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, as required by rule, or

ii. determine the site-specific methane generation rate constant, k, in a Tier 3 determination, and recalculate the NMOC emission rate using the site-specific NMOC concentration from Tier 2 and site-specific methane generation rate constant, k, from Tier 3.

j. If the resulting mass emission rate, recalculated using the site-specific NMOC concentration, is less than 50 megagrams per year, the permittee shall submit annual reports (or 5-year submission per 40 CFR 60.757(b)(1)(ii)) for the estimated NMOC emissions, recalculated each year using the site-specific NMOC concentration and as provided in 40 CFR 60.757(b)(1). The site-specific NMOC concentration shall be retested, as above, every 5 years.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(a)(3)]

(4) For a Tier 3 determination of the NMOC emission rate, the permittee shall determine the site-specific methane generation rate constant, using the procedures provided in Method 2E of Appendix A of 40 CFR, Part 60. The permittee shall estimate the NMOC mass emission rate using the equations from 40 CFR 60.754(a)(1), and included in this permit, using a site-specific methane generation rate constant k and the site-specific NMOC concentration from Tier 2, instead of the default values provided with the calculation in the rule. The permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

a. If the resulting NMOC mass emission rate, calculated using the site-specific methane generation rate constant from Tier 3 and the site-specific concentration of NMOC from Tier 2, is equal to or greater than 50 megagrams per year, the permittee shall comply with 40 CFR 60.752(b)(2) and submit, within one year, a collection and control system design plan, and install the system within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, as required by rule; or

b. If the resulting NMOC mass emission rate, calculated using the site-specific methane generation rate constant from Tier 3 and the site-specific concentration of NMOC from Tier 2, is less than 50 megagrams per year, the permittee shall submit annual reports (or 5-year submission per 40 CFR 60.757(b)(1)(ii)) for the estimated NMOC emissions, recalculated each year using the site-specific methane generation rate constant k and the site-specific NMOC concentration from Tier 2, and submitted as provided in 40 CFR 60.757(b)(1).

c. The site-specific NMOC concentration shall be retested, as above, every 5 years, to be used in the NMOC emission estimate calculations. However, the calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(a)(4)]

(5) The permittee may use other methods to determine the NMOC concentration or site-specific methane generation rate constant k, as an alternative to the methods required in 40 CFR 754(a)(3) or (4), only if the method has been approved by the Administrator of the U.S. Environmental Protection Agency.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(a)(5)]

(6) When calculating emissions for PSD purposes, the permittee shall estimate the NMOC emission rate, for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures. [OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(c)]

(7) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitations:
54.9 tons NMOC /year
9460 tons methane /year

Applicable Compliance Method:
Emissions shall not exceed these values based on the calculations referenced below. These calculations represent the highest emission rates which could occur based on US EPA's Landfill Gas Emission Model (LandGEM).

The maximum gas generation/emissions were calculated or predicted using LandGEM, based on the proposed landfill capacity of (8,530,000 megagrams) divided equally over approximately 29 years of proposed operation, at the maximum receiving rate of 195,000 megagrams of waste material per year. Predictions are for year 2035.

i. NMOC concentrations and emissions were determined according to 40 CFR 60, Appendix A, Method 25C and LandGEM (Tier 2 value of 96).

ii. CH4 emissions were estimated according to US EPA's AP-42, Compilation of Air Pollution Emission Factors, Chapter 2.4, for municipal solid waste landfills, (11/98) and LandGEM.

[OAC 3745-31-05(A)(3), 40 CFR 60 Subpart WWW, and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) 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.

3. P901, Landfill Operations - Active

Operations, Property and/or Equipment Description:

Municipal Solid Waste Landfill (partial active gas collection scenario, with flare - see also Part B – Facility-wide Terms and Conditions)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 03-16197 issued September 26, 2006)	Passive/Fugitive Emissions: 6.89 tons nonmethane organic compounds (NMOC)/year [See b)(2)i] 5610 tons methane/year [See b)(2)i] Flare Emissions: 0.034 pound NMOC/hour; 0.15 ton NMOC/year [See b)(2)i] 28.3 pounds methane/hour; 124 tons methane/year [See b)(2)i] 21.2 pounds carbon monoxide (CO)/hour; 92.9 tons CO/year 3.90 pounds nitrogen oxides (NOx)/hour; 17.1 tons NOx/year 0.73 pound sulfur dioxide (SO2)/hour; 3.20 tons SO2/year 1.07 lbs of particulate matter less than 10 microns (PM10)/hour; 4.69 tons of PM10/year [See b)(2)f] Opacity restrictions [See b)(2)m.i]

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(A)(3) (PTI 03-16197 issued September 26, 2006)	Landfill: best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)b through b)(2)e] There shall be no visible fugitive PE from fugitive dust operations/sources [See b)(2)b] landfill gas control requirements [See b)(2)j]
b.	OAC rule 3745-17-07 (B)	None [See b)(2)g]
c.	OAC rule 3745-17-08 (B)	None [See b)(2)h]
d.	40 CFR Part 60, Subpart WWW	See b)(2)a
e.	40 CFR, Part 63, Subpart AAAA	not applicable [See b)(2)t]

(2) Additional Terms and Conditions

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 b)(2)k].

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.

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.

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.

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).

f. All particulate emissions from the flare are PM10.

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).

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).

i. PTI 03-16197 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 have been established through OAC rule 3745-31-05 (A)(3).

j. The permittee shall install, or have installed, a collection and control system for gas generated within the landfill which meets the requirements specified in b)(2)k through b)(2)q, c)(1) through c)(6), and d)(1) through d)(9).

k. The active gas collection system shall satisfy the following requirements, as specified in 40 CFR 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.

l. The permittee shall route all the collected gas to a control system that complies with either the requirements for flares in b)(2)m, b)(2)n, and b)(2)o, or the alternative requirements in b)(2)p.

m. Flare requirements:

i. Flare shall be designed and operated with no visible emissions as determined by the Method 22 of Appendix A of 40 CFR, Part 60, except for a periods not to exceed a total of 5 minutes during any 2 consecutive hours. The observation period for compliance determination is 2 hours and shall be used according to Method 22.

ii. Flare shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of flame.

iii. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by 40 CFR 60 Appendix A Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

[40 CFR 60.752(b)(2)(iii)(A), 40 CFR 60.18]

n. 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 in a flare shall be calculated using the following equation:

$H_t = K \times \sum (i = 1 \text{ to } n) \text{ of } C_i H_i$

where:

K = constant, 1.740×10^{-7} [(1/ppm)(g mole/scm)(MJ/Kcal)] where the standard temperature for (g mole/scm) is 20 degree Celsius;

H_t = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 degree Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degree Celsius;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by 40 CFR 60 Appendix A Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in 40 CFR 60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 degree Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated. For this test, the net heating value is calculated from the concentration of methane in the landfill gas as measured by 40 CFR 60 Appendix A Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic compounds, hydrogen, and carbon monoxide is not applicable.

o. Flare requirements (cont.):

i. Steam-assisted and non-assisted flares shall be designed for and operated with an exit velocity, as determined by dividing the volumetric flow rate (in units of standard temperature and pressure) as determined by 40 CFR 60 Appendix A Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip,) less than 18.3 m/sec (60 ft/sec), except as provided in o.ii and o.iii below.

ii. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by dividing the volumetric flow rate (in units of standard temperature and pressure) as determined by 40 CFR 60 Appendix A Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip, equal to or greater than 18.3 m/sec (60 ft/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).

iii. Steam-assisted and non-assisted flares designed for and operated with an exit velocity, as determined by dividing the volumetric flow rate (in units of standard temperature and pressure) as determined by 40 CFR 60 Appendix A Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip, less than the velocity, V_{max}, as determined by the equation below, and less than 122 m/sec (400 ft/sec) are allowed.

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

Where:

V_{max} = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
H_t = The net heating value as determined in b)(2)n.

p. All collected gas shall comply with at least one of the following requirements [See g)(2)]:

i. The collected gas may be routed to a flare designed and operated in accordance with the requirements specified in b)(2)m, b)(2)n, and b)(2)o; 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 c)(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 p.ii above. The requirements of p.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 c)(7)]. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of p.i or p.ii above; AND/OR

v. The collected gas may be routed to a flare that meets the requirements of 40 CFR 60 Subpart WWW as provided for in 40 CFR 60.18(c)(3)(i).

q. The collection and control system may be capped or removed provided that all of the following conditions are met, as specified in 40 CFR 60.752 (b)(2)(v):

i. The landfill should no longer be accepting solid waste and be permanently closed, pursuant to 40 CFR 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.

r. 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 non-friable asbestos containing material that has become friable, (c) Category I non-friable asbestos containing material that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II non-friable 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."

s. In addition, this facility shall not accept for disposal any Category II non-friable asbestos containing material.

t. For asbestos materials, this facility shall be limited to accepting Category I non-friable asbestos containing material that have not or will not be subjected to sanding, grinding, cutting or abrading.

u. The facility shall ensure that any Category I non-friable 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 b)(2)r.

v. All terms from b)(2)r through b)(2)u are defined as in 40 CFR 61.141, amended November 20, 1990, or any subsequent revisions.

w. This facility does not meet the criteria in 40 CFR 63.1935 to make the facility subject 40 CFR Part 63, Subpart AAAA.

c) 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).

[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(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 d)(2)d.
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(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 b)(2)k and b)(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.

In any implementation of the above requirement, when the collection and control system is inoperable and the system will not be back in service before the vacuum in the landfill is displaced, the permittee shall be allowed to remove the wellheads prior to the build-up of landfill gas that can cause any damage to the capping system or contribute to offsite migration.
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(5) The permittee shall operate the flare at all times when the collected gas is routed to the system.
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

(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].
[OAC 3745-31-05(A)(3) and 3745-77-07(B)(1)]

d) 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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(2) The permittee shall monitor surface concentrations of methane on a quarterly basis as 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 c)(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.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(5) The permittee shall maintain the following information for the life of the control equipment as measured during, if applicable, 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:

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

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 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:

$Q_m = \sum i=1 \text{ to } n [2 k L_o M_i (e^{(-kti)})]$

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 ith section, megagrams
t_i = age of the ith 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 d)(5)a.i and d)(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 d)(5)a.i or d)(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.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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:

landfill fugitive dust operations/sources:	minimum inspection frequency:
waste dumping/unloading	once during each day of operation
waste compaction	once during each day of operation
soil excavation and handling	once during each day of operation
wind erosion - surfaces, stockpiles	once during each day of operation

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(12) 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 (12)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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

e) 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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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).

[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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 c)(1), c)(2), and c)(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(5) The permittee shall submit the following information with the initial performance test report, if applicable, as specified in 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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

(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.
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitations:
6.89 tons passive/fugitive NMOC/year (emissions not captured by the collection and control system)
5610 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:

Landfill Unit	Waste Capacity (Mg)
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;

Landfill Unit	Capture Efficiency
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
28.3 pounds methane/hour and 124 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 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:

Landfill Unit	Waste Capacity (Mg)
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;

Landfill Unit	Capture Efficiency
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 21.2 pounds CO/hour

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 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 NOx/hour

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 NOx/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

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

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:
Flare Emissions 92.9 tons CO/year
Flare Emissions 17.1 tons NOx/year
Flare Emissions 3.20 tons SO2/year
Flare Emissions 4.69 tons PM10/year

Applicable Compliance Method:
The annual allowable emission limitations were developed by multiplying the hourly allowable emission rates by a maximum operating schedule of 8,760 hours per year, and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the hourly limitations, compliance with the annual limitations will be assumed.

h. 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.

i. 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.

[All of Section f): OAC 3745-31-05(A)(3) and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) 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.

(2) 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 b)(2)p.ii, and/or b)(2)p.iii, and/or b)(2)p.iv.