Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/2/2011

Certified Mail

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

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0322010254
Permit Number: P0107310
Permit Type: OAC Chapter 3745-31 Modification
County: Erie

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General’s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

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 can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Canada

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Erie County Sanitary Landfill

Facility ID:	0322010254
Permit Number:	P0107310
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	6/2/2011
Effective:	6/2/2011

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Erie County Sanitary Landfill

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. F002, Municipal Solid Waste Landfill 14
2. P901, Municipal Solid Waste Landfill with Active Gas Collection System and Flare 31

Authorization

Facility ID: 0322010254
Facility Description: Municipal Solid Waste Landfill.
Application Number(s): A0040774
Permit Number: P0107310
Permit Description: Permit to Install modification to allow for the vertical expansion of a Municipal Solid Waste Landfill.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $400.00
Issue Date: 6/2/2011
Effective Date: 6/2/2011

This document constitutes issuance to:

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

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107310
Permit Description: Permit to Install modification to allow for the vertical expansion of a Municipal Solid Waste Landfill.

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

Emissions Unit ID:	**F002**
Company Equipment ID:	Fugitive Municipal Solid Waste Landfill
Superseded Permit Number:	03-13576
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	Municipal Solid Waste Landfill with a Flare
Superseded Permit Number:	03-16197
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

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

3. General Requirements

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

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

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

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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

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

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

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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

2. Based on the Landfill Gas Emission Model (LandGEM), this facility 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 a 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 both emission units F002 and 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. Emissions unit P901 serves to present, in a simplified manner, the additional requirements associated with the installation and operation of an active gas collection system. It should be noted that the requirements presented under emissions unit F002, are in effect at all times even when the landfill is operated with an active gas collection system.

4. The permittee shall maintain daily records that identify whether the landfill is operating with an active gas collection system (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.

C. Emissions Unit Terms and Conditions

1. F002, Municipal Solid Waste Landfill

Operations, Property and/or Equipment Description:

Passive Vent Municipal Solid Waste Landfill

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) b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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), as effective 11/30/01	See b)(2)a. 5.17 tons fugitive volatile organic compounds (VOC)/year [See b)(2)b.] 3.93 tons fugitive particulate matter less than 10 microns (PM10)/year Visible emissions from fugitive dust 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)d. through b)(2)f.]
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-17-07(B)(1)	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).
d.	OAC rule 3745-17-08(B)	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).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR 60.750 et seq. (NSPS Subpart WWW)	See b)(2)g. through b)(2)j.
f.	40 CFR 63.1930 et seq. (MACT Subpart AAAA)	None [See b)(2)k.]

(2) Additional Terms and Conditions

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

b. The annual emission limitation of 5.17 tons VOC represents the VOC portion of the fugitive nonmethane organic compound (NMOC) emission rate from the landfill. For the purpose of this permit and federal enforceability, NMOC emissions have been converted to VOC by applying the AP-42 Chapter 2.4 (11/98) conversion rate of 39% to the predicted NMOC emission rate from the Landfill Gas Emission Model (LandGEM). An NMOC emission limit was not established under this rule because there is not an established national ambient air quality standard (NAAQS) associated with NMOC [See b)(2)c.]. 40 CFR 60.750 et seq. (NSPS, Subpart WWW) addresses NMOC emissions; therefore, the monitoring, recordkeeping, and reporting requirements of this permit will reflect NMOC rather than VOC.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the PE, NMOC, and methane emitted from this emissions unit. BAT (under Senate Bill 265 changes) is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. PE (also referred to as total suspended particulate or particulate matter), NMOC, and methane are air contaminants that do not involve an established NAAQS.

Additionally, the Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC and PM_{10} emissions from this air contaminant source because they are less than 10 tons per year.

d. The following landfill fugitive dust operations/sources are covered by this permit and subject to the above requirements:

i. daily cover and handling and placement
ii. solid waste handling (dumping)
iii. spreading, grading and compaction
iv. truck loading and unloading
v. soil transport
vi. storage pile activities (loading, unloading, wind erosion)

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

e. 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 permittee's permit application, the permittee has committed to treat with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

f. The above-mentioned control measures shall be employed if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures is unnecessary.

Implementation of the control measures shall not be necessary for fugitive dust sources which are 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.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

g. 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)]

h. 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.

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.

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.

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)]

i. 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) and 60.757(a)]

j. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the permittee shall request the appropriate Ohio EPA District Office or local air agency to reopen the Title V permit for review, or determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the procedures provided in this permit.

[40 CFR 60.752(c)]

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

l. The facility shall not accept for disposal any asbestos-containing materials (ACM) that are subject to the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos, 40 CFR Part 61, Subpart M, Section 141, and/or OAC rule 3745-20, or any subsequent revisions to either rule.

m. The facility shall treat any suspected ACM that are not subject to the provisions of the NESHAP for asbestos, 40 CFR Part 61, Subpart M, Section 141, in a manner to prevent those materials from becoming friable. In the event that the unregulated ACM becomes friable, it is subject to the provisions of the NESHAP.

n. The permittee shall develop, implement, and maintain a “Non-Regulated Asbestos Disposal Operating Procedure and Spill Contingency Plan” (Plan) which contains the following, at a minimum:

i. facility policy regarding the acceptance of non-regulated ACM;

ii. procedures for handling suspected non-regulated ACM in order to prevent the asbestos from becoming friable;

iii. procedures for handling any non-regulated ACM that becomes friable due to landfilling activities;

iv. procedures for handling any accidental disturbance and/or re-excavation of disposed ACM;

v. recordkeeping procedures regarding the disposal and location of non-regulated ACM; and

vi. emergency notification procedures.

Authorized personnel shall be knowledgeable in the procedures of the Plan. Emissions control equipment shall be available for wetting and containing asbestos in the event of a release. All equipment required to implement the Plan shall be maintained in accordance with good engineering practices to ensure that the equipment is in a ready-to-use condition and in an appropriate location for use. The Plan shall be available for inspection at this facility at all times.

[OAC rule 3745-31-05(E)]

c) Operational Restrictions

(1) The maximum waste receipt rates for this emissions unit shall not exceed:

a. 800 tons waste per day; and

b. 240,800 tons waste per year.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records regarding their waste receipt rates:

a. daily records of the amount of total waste accepted by the landfill, in tons per day, for each calendar day; and

b. monthly records of the amount of total waste accepted by the landfill, in tons per year [summary of d)(1) for each calendar month-to-date].

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

(2) 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 Operation/Source	Minimum Inspection Frequency
daily cover and handling and placement	once during each day of operation
solid waste handling (dumping)	once during each day of operation
spreading, grading and compaction	once during each day of operation
truck loading and unloading	once during each day of operation
soil transport	once during each day of operation
storage pile activities [as in b)(2)d.vi]	once during each day of operation

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

(3) The purpose of the inspections is to determine the need for implementing the above-mentioned 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 event shall be performed as soon as such event(s) has (have) ended, except if the next inspection is within one week.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

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

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in d)(4)d. shall be kept separately for each landfill fugitive dust operation/source listed above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

(5) 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.

[40 CFR 60.758(a)]

(6) 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. The permittee has chosen to calculate and submit the estimated NMOC emission rate in 5-year periods, as allowed per 40 CFR 60.757(b)(1)(ii); therefore, the NMOC emission rate shall be calculated and reported each consecutive 5-year period, until a collection and control system is installed, as required by 40 CFR 60.752(b)(2), that meets the requirements of 40 CFR 60.753 and 60.755, or the landfill is closed.

[40 CFR 60.752(b)(2)]

(7) 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).

[40 CFR 60.758(d)(2)]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily and/or annual waste receipt restrictions of 800 tons/day and 240,800 tons/year.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

(3) In accordance with the Monitoring and Recordkeeping Requirements established in d)(2), d)(3), and d)(4), the permittee shall submit quarterly deviation (excursion) reports that identify any of 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 quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC 3745-31-05(A)(3), as effective 11/30/01]

(4) 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. This estimate shall be recalculated 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. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions and is due by January 31 every 5th year if the estimated waste acceptance rate is not exceeded during the 5-year reporting period.

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

[40 CFR 60.757(b)]

(5) 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 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 recalculated 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.

[40 CFR 60.757(c)]

(6) 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).

Ohio EPA, Northwest District Office
347 NorthDunbridge Road
Bowling Green, Ohio 43402

[40 CFR 60.7]

(7) 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).

[40 CFR 60.757(d)]

(8) Within 60 days following the issuance of this permit, the permittee shall submit a copy of the "Non-Regulated Asbestos Disposal Operating Procedure and Spill Contingency Plan" required in b)(2)n. to the appropriate Ohio EPA District Office or local air agency for approval. Any subsequent revisions to the Plan shall be submitted to the appropriate Ohio EPA District Office or local air agency at the time of the revision.

[OAC rule 3745-31-05(E)]

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 " L_0"; and 4,000 ppm by volume as hexane for "C_{NMOC}", 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:

$$M_{NMOC} = \sum_{i=1}^{n} 2k\, L_0 M_i\, (e^{-kti})\, (C_{NMOC})\, (3.6\text{x}10^{-9})$$

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 M_i, 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:

$$M_{NMOC} = 2L_oR(e^{-kc} - e^{-kt})\, (C_{NMOC})(3.6 \times 10^{-9})$$

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.

[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).

[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 C_{NMOC} 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 C_{NMOC} as carbon to C_{NMOC} 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 are 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.

[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.

[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.

[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.

[40 CFR 60.754(c)]

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

a. Emission Limitation:
5.17 tons fugitive VOC/year

Applicable Compliance Method:
These emissions represent the highest gas generation/emissions rates which could occur at this facility based on the following landfill capacities:

Landfill Unit	Landfill Capacity (tons)	Maximum Receiving Rate
Closed Unit	1,109,999	Landfill Closed 1988
Closed South Unit	1,413,130	Landfill Closed 2002
Active/BAT Unit	4,720,422	800 tons/day; 240,800 tons/year

The landfill emissions and limitations contained in this permit can be documented as follows:

i. NMOC emissions were calculated by Landfill Gas Emission Model (LandGEM). The predicted NMOC emissions were converted to VOC emissions by applying the AP-42 Chapter 2.4 (11/98) conversion rate of 39%.

[40 CFR 60, Subpart WWW; OAC rule 3745-31-05(A)(3), as effective 11/30/01]

b. Emission Limitation:
3.93 tons fugitive PM_{10}/year

Applicable Compliance Method:
The emission limitation was established by combining the emissions as calculated for the landfill fugitive dust operations/sources in the table below:

Activity	PE Emission Factor; PM_{10} Scaling/Ratio Factor	Source of Emission Factor or Equation	Annual Basis	Total Emissions (tons/year)
Soil Loading	0.0005 lb/ton; 0.0002 lb/ton	AP-42, Section 13.2.4 (1/95)	90,300 tons	PE – 0.02 PM_{10} – 0.01
Soil Unloading	0.0005 lb/ton; 0.0002 lb/ton	AP-42, Section 13.2.4 (1/95)	90,300 tons	PE – 0.02 PM_{10} – 0.01
Waste	0.0002 lb/ton;	AP-42, Section	125,000tons	PE – 0.01

Activity	PE Emission Factor; PM_{10} Scaling/Ratio Factor	Source of Emission Factor or Equation	Annual Basis	Total Emissions (tons/year)
Dumping	0.0001 lb/ton	13.2.4 (1/95)		PM_{10} – 0.006
Waste Compaction - Dozer	2.64 lb/dozer hr; 0.52 lb/dozer hr	AP-42, Section 11.9-1 (7/98)	2,800 hours	PE – 3.67 PM_{10} – 0.73
Soil Transport	8.16 lb/VMT; 2.20 lb/VMT	AP-42, Section 13.2.2 (12/03)	15,050 VMT	[Applied 85% control for watering.] PE – 9.21 PM_{10} – 2.48
Wind Erosion – Exposed Surfaces	0.38 ton/acre/yr; 0.049 ton/acre/yr	AP-42, Section 11.9-4 (7/98)	20 acres	[Applied 30% control for natural mitigation.] PE – 5.32 PM_{10} – 0.69
TOTAL				**PE – 18.25** **PM_{10} – 3.93**

Therefore, provided compliance is shown with the requirements associated with Best Available Control Measures, compliance with the annual limitation will be assumed.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

c. Emission Limitation:
Visible emissions of fugitive dust shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method 9 as set forth in "Appendix A on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(3)(a) and B)(3)(b) of OAC rule 3745-17-03.

[OAC rule 3745-31-05(A)(3), as effective 11/30/01]

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. P901, Municipal Solid Waste Landfill with Active Gas Collection System and Flare

Operations, Property and/or Equipment Description:

Operating Scenario: Active Gas Collection System with Flare

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) b)(1)c.; b)(1)d.; b)(2)d. through b)(2)g.; c)(1); d)(1) through d)(6); e)(2) through e)(5); and f)(1).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(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 are identified below. 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.	ORC 3704.03(T)	Flare Combustion Emissions: 46.0 pounds carbon monoxide (CO)/10^6 dscf methane
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)a. and b)(2)b. Fugitive Landfill Gas Emissions: 2.46 tons fugitive VOC/year Controlled Landfill Gas Emissions: 0.14 pound volatile organic compounds (VOC)/hour; 0.03 ton VOC/year Flare Combustion Emissions: 39.0 pounds nitrogen oxides (NOx)/10^6 dscf methane; 9.37 tons NOx/year 15.0 pounds PM_{10}/10^6 dscf methane; 4.69 tons PM_{10}/year 1.13 pounds sulfur dioxide (SO_2)/hour; 4.95 tons SO_2/year
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)c.

d.	OAC rule 3745-31-05(E)	See b)(2)d. Landfill gas collection and control requirements [See b)(2)e. through b)(2)g.] Visible Emission Limitation [See b)(2)g.ii.]
e.	OAC rule 3745-17-07(B)(1)	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).
f.	OAC rule 3745-17-08(B)	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).
g.	40 CFR 60.750 et seq. (NSPS Subpart WWW)	See b)(2)h.
h.	40 CFR 63.1930 et seq. (MACT Subpart AAAA)	None [See b)(2)i.]

(2) Additional Terms and Conditions

a. The VOC emission limitations represent the VOC portion of the fugitive and controlled nonmethane organic compound (NMOC) emission rates from the landfill. For the purpose of this permit and federal enforceability, NMOC emissions have been converted to VOC by applying the AP-42 Chapter 2.4 (11/98) conversion rate of 39% to the predicted NMOC emission rate from the Landfill Gas Emission Model (LandGEM). NMOC emission limits were not established under this rule because there is not an established national ambient air quality standard (NAAQS) associated with NMOC [See b)(2)d.]. 40 CFR 60.750 et seq. (NSPS, Subpart WWW) addresses NMOC emissions; therefore, the monitoring, recordkeeping, and reporting requirements of this permit will reflect NMOC rather than VOC.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. The requirements of this also rule include compliance with the state-only restrictions established in accordance with OAC rule 3745-31-05(E).

On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 Changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists

as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

It should be noted that the landfill gas collection and control requirements established pursuant to OAC rule 3745-31-05(E) will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the PE, NMOC, and methane emitted from this emissions unit. BAT (under Senate Bill 265 changes) is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. PE (also referred to as total suspended particulate or particulate matter), NMOC, and methane are air contaminants that do not involve an established NAAQS.

Additionally, the BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the VOC, SO_2, and PM_{10} emissions from this air contaminant source because each pollutant is less than 10 tons per year.

d. The Ohio EPA is imposing terms and conditions under OAC rule 3745-31-05(E) "State-only enforceable limitations" associated with the installation and operation of the voluntary active gas collection system (including a flare). The requirements of OAC rule 3745-31-05(E) contained in this permit are a necessary component of any approval by the Ohio EPA, Division of Materials and Waste Management associated with the facility's vertical expansion modification.

e. It is the permittee's intent to install an active gas collection system in order to collect and distribute landfill gas to off-site facilities where the gas will be combusted to generate heat and/or electricity.

All collected gas shall comply with at least one of the following requirements:

i. The collected gas may be routed to a flare designed and operated in accordance with the requirements specified in b)(2)f. and b)(2)g.; 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)(3)], 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 b)(2)e.ii. above. The requirements of b)(2)e.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)(2)]. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of b)(2)e.i or b)(2)e.ii above.

[OAC rule 3745-31-05(E)]

f. The active gas collection system shall satisfy the following requirements:

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 be designed to minimize off-site migration of subsurface gas.

[OAC rule 3745-31-05(E)]

g. Except as provided in b)(2)e., any collected gas shall be vented to an open flare designed and operated as follows:

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

iv. Flares shall be steam-assisted, air-assisted, or nonassisted. The permittee shall comply with either the requirements in paragraphs (a) and (b); OR the requirements in paragraph (c):

(a) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 BTU/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 BTU/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined as follows:

$H_T = K \times \sum (i = 1 \text{ ton}) \text{ of } C_i H_i$

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.

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

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

(ii) steam-assisted and non-assisted flares designed for and operated with an exit velocity of less than the velocity, Vmax, and less than 122 m/sec (400 ft/sec) are allowed, as determined by the following equation:

$Log_{10} (V_{max}) = (H_T + 28.8)/31.7$

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)g.iv.(a).

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

$V_{max} = (X_{H2} - K_1)*K_2$

Where:

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

K_1 = Constant, 6.0 volume-percent hydrogen

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

X_{H2} = Volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77.

v. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the following equation:

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

Where:

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

8.706 = Constant

0.7084 = Constant

H_T = Net heating value, as determined in b)(2)g.iv.(a).

[OAC rule 3745-31-05(E)]

h. The requirements for NSPS Subpart WWW are contained in the terms and conditions of emissions unit F002. The permittee is required to comply with all requirements contained in the terms and conditions for emissions unit F002 at all times, even when operating with active gas collection (See Facility-Wide Term and Condition B.2. and B.3.).

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

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing state-only requirements for the active gas collection system [See b)(2)d.]:

a. The permittee shall operate the collection system with negative pressure at each well except under the following conditions:

i. a fire or increased well temperature (the permittee shall record instances when positive pressure occurs in efforts to avoid a fire);

ii. use of a geomembrane or synthetic cover (the permittee shall develop acceptable pressure limits in the design plan); and

iii. 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).

b. 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.

c. 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)f. and b)(2)g. 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.

d. The permittee shall operate the flare at all times when the collected gas is routed to the system.

e. 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(E)]

(2) 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].

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(E)]

(2) 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(E)]

(3) 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(E)]

(4) 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 flare type (i.e., steam-assisted, air-assisted, or non-assisted);

b. all visible emission readings;

c. heat content determinations of the gas;

d. flow rate or bypass flow rate measurements;

e. exit velocity determinations made during the performance test as specified in 40 CFR Part 60.18; and

f. continuous records of the flare flame monitoring and all periods of operation during which the flare flame is absent.

[OAC 3745-31-05(E)]

(5) 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(E)]

(6) 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(E)]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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(E)]

(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(E)]

(4) The permittee shall submit annual reports of the recorded information below:

a. value and length of time for any exceedance(s) of the of applicable parameters contained in c)(1)a., c)(1)b., and c)(1)d.;

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; and

e. 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(E)]

(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 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; and

c. the provisions for the control of off-site migration.

[OAC 3745-31-05(E)]

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:

i. Controlled Landfill Gas:

0.14 pound VOC/hour and 0.03 ton VOC/year

ii. Fugitive/Uncontrolled Landfill Gas:

2.46 tons fugitive VOC/year

Applicable Compliance Method:
These emissions represent the highest gas generation/emissions rates which could occur at this facility based on the following landfill capacities:

Landfill Unit	Landfill Capacity (tons)	Maximum Receiving Rate
Closed Unit	1,109,999	Landfill Closed 1988
Closed South Unit	1,413,130	Landfill Closed 2002
Active/BAT Unit	4,720,422	800 tons/day; 240,800 tons/year

The landfill emission limitations contained in this permit can be documented as follows:

iii. NMOC emissions were calculated by Landfill Gas Emission Model (LandGEM). The predicted NMOC emissions were converted to VOC emissions by applying the AP-42 Chapter 2.4 (11/98) conversion rate of 39%.

iv. The following landfill gas collection system capture efficiencies, based on engineering design:

(a) Closed Unit: Not collected/vented to flare;
(b) Closed South Unit: 70%; and
(c) Active/BAT Unit: 52.5%.

v. A 98% control efficiency from the flare for the control of NMOC, as applicable.

vi. A maximum operating schedule of 8,760 hours/year.

[OAC rule 3745-31-05(E)]

b. Emission Limitations: Flare Combustion Emissions

i. 39.0 pounds NOx/10^6dscf methane and 9.37 tons NOx/year;

ii. 46.0 pounds CO/10^6dscf methane and 14.10 tons CO/year; and

iii. 15.0 pounds PM_{10}/10^6dscf methane and 4.69 tons PM_{10}/year.

Applicable Compliance Method:
The above flare combustion emission limitations were established based on the emission factors from AP-42 Chapter 2.4, Municipal Solid Waste Landfills (Draft October 2008).

Compliance with the annual emission limitations may be demonstrated by multiplying the pound pollutant/10^6dscf methane limitations by a maximum operating schedule of 8,760 hours/year and then dividing by 2,000 pounds/ton.

[OAC rule 3745-31-05(E)]

c. Emission Limitations: Flare Combustion Emissions
1.13 pounds SO_2/hour and 4.95 tons SO_2/year

Applicable Compliance Method:
The permittee may demonstrate compliance with the hourly emission limitation by calculating emissions using a combination of the hydrogen sulfide (30 ppvm) and carbonyl sulfide (15 ppmv) concentrations (from laboratory analysis), a landfill gas generation rate of 2,571 scfm, and assuming that 100% of the sulfur content is converted to SO_2.

Compliance with the annual emission limitation may be demonstrated by multiplying the hourly limitation by a maximum operating schedule of 8,760 hours/year and then dividing by 2,000 pounds/ton.

[OAC rule 3745-31-05(E)]

d. Emission Limitation:
The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:
If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method 22 as set forth in "Appendix A on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"). The observation period for compliance determination is 2 hours and shall be used according to Method 22.

[OAC rule 3745-31-05(E)]

g) Miscellaneous Requirements

(1) None.