



12/10/2014

Scott Herman
 Mahoning Landfill, Inc.
 3510 Garfield Road
 New Springfield, OH 44443

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0250000840
 Permit Number: P0117031
 Permit Type: OAC Chapter 3745-31 Modification
 County: Mahoning

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

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. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA
Ohio EPA-NEDO; Pennsylvania; West Virginia



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Mahoning Landfill, Inc.**

Facility ID:	0250000840
Permit Number:	P0117031
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	12/10/2014
Effective:	12/10/2014



Division of Air Pollution Control
Permit-to-Install
for
Mahoning Landfill, Inc.

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Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

Authorization

Facility ID: 0250000840
Facility Description: Sanitary Landfill
Application Number(s): A0049563
Permit Number: P0117031
Permit Description: Chapter 31 modification permit for landfill expansion to include LFG collection system and open-flare
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$950.00
Issue Date: 12/10/2014
Effective Date: 12/10/2014

This document constitutes issuance to:

Mahoning Landfill, Inc.
3510 Garfield Road
Springfield Twp., OH 44443

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

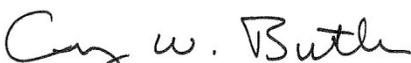
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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


Craig W. Butler
Director



Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

Authorization (continued)

Permit Number: P0117031

Permit Description: Chapter 31 modification permit for landfill expansion to include LFG collection system and open-flare

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

Emissions Unit ID:	F001
Company Equipment ID:	Roadways and parking areas
Superseded Permit Number:	02-20127
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Landfill operations
Superseded Permit Number:	02-20127
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

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) 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, Northeast District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northeast 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, Northeast 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) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted



local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (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.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast 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, Northeast 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, Northeast 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 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) not exempt from the requirement to obtain a Permit-to-Install.

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 permittee 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 "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director 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.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- 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 operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly 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.



Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

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.



Final Permit-to-Install
Mahoning Landfill, Inc.
Permit Number: P0117031
Facility ID: 0250000840
Effective Date: 12/10/2014

C. Emissions Unit Terms and Conditions



1. F001, Roadways and parking areas

Operations, Property and/or Equipment Description:

Facility roadways and parking areas.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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 3704.03(T)	<p>Fugitive particulate emissions shall not exceed 155.26 tons per year.</p> <p>There shall be no visible particulate emissions of fugitive dust from any unpaved roadway or parking area surface except for a time not to exceed 3 minutes during any 60-minute observation period.</p> <p>There shall be no visible particulate emissions of fugitive dust from any paved roadway or parking area surface except for a time not to exceed 1 minute during any 60-minute observation period.</p> <p>See b)(2)a through b)(2)f.</p>
b.	OAC rule 3745-17-07(B)	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).
c.	OAC rule 3745-17-08(B)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).



(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements.

In accordance with the permittee's application, the permittee has committed to treat the paved and unpaved roadways and parking areas with water via a spray truck at sufficient treatment frequencies and to maintain and enforce speed limits sufficient to ensure compliance with the visible emissions limitations of this permit.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved or unpaved roadways and parking areas that 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- e. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface resulting from the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology (BAT) requirements of OAC rule 3745-31-05.



c) Operational Restrictions

- (1) The permittee shall post speed limit signs identifying the maximum on-site speed limit on facility roadways.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of the paved and unpaved roadways and parking areas once per day of operation.
- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- (3) The permittee may, upon receipt of written approval from the Northeast District Office of Ohio EPA, modify the above-mentioned inspection frequencies, if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(4)d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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 deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

There shall be no visible particulate emissions of fugitive dust from any unpaved roadway or parking area surface except for a time not to exceed three (3) minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the emission limitation for unpaved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.
 - b. Emission Limitation:

There shall be no visible particulate emissions of fugitive dust from any paved roadway or parking area surface except for a time not to exceed one (1) minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the emission limitation for paved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.
 - c. Emission Limitation:

Fugitive particulate emissions shall not exceed 155.26 tons per year.



Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the emission factor equations in sections 13.2.1 and 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/11 and 11/06, respectively) for paved roadways and unpaved roadways, respectively. These emission limits are based on 16,359 Vehicular miles travelled per year (VMT/yr) on paved roadways by Waste Trucks with a 80% control efficiency; 13 VMT/yr on paved roadways by Triaxle Trucks with a control efficiency of 80%; 225,757 VMT/yr by Waste Trucks on unpaved roadways with a control efficiency of 75%; 182 VMT/yr by Triaxle Trucks on unpaved roadways with a 50% control efficiency; 5,320 VMT/yr by Soil Trucks making 10 trips a day on unpaved roadways with a control efficiency of 50% and 21,313 VMT/yr by Soil Trucks making 27 trips a day on unpaved roadways with a control efficiency of 75%.

g) Miscellaneous Requirements

- (1) None.



2. F002, Landfill operations

Operations, Property and/or Equipment Description:

Municipal Solid Waste (MSW) Landfill - operations - waste disposal activities including dumping, spreading, compacting, covering, and gas generation.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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)	<p>Landfill Operations:</p> <p>Visible particulate emissions of fugitive dust (material transfer, aggregate handling, load-in/load-out operations and wind erosion) from this emissions unit shall not exceed 20% opacity as a 3-minute average.</p> <p>Fugitive particulate emissions shall not exceed 0.38 ton per year.</p> <p>Use of fugitive dust control measures at sufficient frequencies to comply with the above emission limitations.</p> <p>See b)(2)c.</p> <p>2100 cfm Open-Flare:</p> <p>Designed to meet 0.37 lb/mmBtu of CO emissions.</p> <p>Designed to meet 0.068 lb/mmBtu of NO_x emissions.</p> <p>Sulfur dioxide (SO₂) emissions, from the 2100 cfm open-flare, shall not exceed 18.6 tons per year.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D)	2100 cfm Open-Flare See b)(2)g.
c.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001	2100 cfm Open-Flare Particulate matter/particulate matter less than 10 microns in diameter (PM/PM ₁₀) emissions, from the 2100 cfm open-flare, shall not exceed 4.69 tons per year. Hydrogen chloride (HCl) emissions, from the 2100 cfm open-flare, shall not exceed 2.23 tons per year. Non-methane organic compound (NMOC) emissions, from the 2100 cfm open-flare, shall not exceed 1.48 tons per year. See b)(2)a.
d.	OAC rule 3745-31-05(A)(3) as effective 12/01/2006	See b)(2)b.
e.	OAC rule 3745-17-07(B)	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 permittee 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).
g.	OAC Chapter 3745-19	See b)(2)d.
h.	40 CFR Part 60, Subpart WWW	See b)(2)e.
i.	40 CFR Part 63, Subpart AAAA	See b)(2)f.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the 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 ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 TPY. 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 revision 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 OAC rule 3745-31-05, then these emission limits and control measures no longer apply.

- b. 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 BAT requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the HCl, PM/PM₁₀, and NMOC emissions since the potential to emit is less than 10 tons per year.
- c. Compliance with 40 CFR Part 60, Subpart WWW shall be sufficient to demonstrate compliance with the work practice standard to minimize fugitive landfill gas emissions.
- d. There shall be no open burning, in violation of OAC chapter 3745-19, at this facility.
- e. The complete NSPS requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting Ohio EPA, Northeast District Office, Division of Air Pollution Control. The applicable requirements are listed in c)(1), d)(1), e)(1) and f)(2) below.

60.752(b)(2)(i)	Collection and control system design plan requirements
60.752(b)(2)(ii)	Collection and control system installation requirements
60.752(b)(2)(iii)	Control device design and operating requirements
60.752(b)(2)(iv)	Operation of the gas collection and control system
60.752(b)(2)(v)	Provisions for capping or removing the GCCS
60.755(a)(6)	Approval by Administrator for non-conforming GCCS
60.755(b)	Timeline for placement of wells
60.759	Active collection system specifications

- f. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting Ohio EPA, Northeast District Office, Division of Air Pollution Control. The applicable requirements are listed in c)(2), d)(2), and e)(2) below.

63.1990	Definitions
63.1945	Compliance timeframe
63.1950	Termination of compliance requirements
63.1955(a)(1)	Compliance with 40 CFR 60, subpart WWW
63.1955(b)	Compliance standards for collection and control system
63.1955(c)	Approval by Administrator for non-conforming GCCS



- g. The maximum annual combustion of landfill gas (LFG) from the collection and control system to all control equipment (P001-P005 and 2100 cfm open-flare) shall not exceed 1,716,084 Mcf/yr (3,265 cfm x 60 min/hr x 8760 hrs/yr x Mcf/1000 cf) based upon a rolling, 12-month summation.

Based upon the above and the permit application, the facility has committed to applying for a permit to install additional control device capacity within 180 days of satisfying the following:

- i. the facility's captured landfill gas meets or exceeds 1,544,476 Mcf (90% of the allowable annual combustion limitation as set forth in this permit), and
- ii. the collection system must be expanded in accordance with 40 CFR 60.753 and/or 60.755 and the newly collected landfill gas volume is anticipated to exceed the annual combustion limitation.
- h. Deposition and burial operations of any suspected non-regulated Category I or Category II asbestos-containing waste or demolition debris shall be conducted in a manner that prevents any asbestos-containing material from being broken up or dispersed before such materials are buried.
- i. The facility cannot accept for disposal any regulated asbestos-containing material as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR Part 61, Subpart M, Section 141 and OAC rule 3745-20, or any subsequent revisions to either rule. Regulated asbestos-containing material is defined to include:
- i. friable asbestos material;
- ii. Category I nonfriable asbestos-containing material that has become friable;
- iii. Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or
- iv. Category II nonfriable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.
- j. The permittee shall be limited to accepting only non-regulated asbestos-containing waste materials. The permittee shall ensure that any non-regulated Category I or II nonfriable asbestos-containing waste materials accepted for disposal will not become friable during processing at the landfill; and asbestos-containing waste materials accepted for disposal do not become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during its handling, transfer, and burial at the landfill. If any regulated Category II asbestos-containing waste material arrives at the landfill it cannot be accepted



for disposal; and if any non-regulated asbestos-containing material becomes friable after it is accepted for disposal the permittee shall:

- i. not cause or permit visible emissions from the non-regulated Category I or II asbestos-containing waste materials during on-site transportation, transfer, deposition, or compacting operations;
- ii. assure that deposition and burial operations are conducted in a manner which prevents handling by equipment or persons that causes the non-regulated Category I or II asbestos-containing waste materials to be broken-up or dispersed before the materials are buried;
- iii. cover the non-regulated Category I or II asbestos-containing waste material with at least twelve inches of non-asbestos-containing material, as soon as practicable after deposition, but no later than at the end of the operating day; and
- iv. during the unloading, deposition, burial, and initial compaction of the non-regulated Category I or II asbestos-containing waste materials, assure that the disposal site is restricted adequately to deter unauthorized entry of the general public and any unauthorized personnel to within one hundred feet of the operations.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.753(a)	Collection system installation requirement
60.753(b)	Collection system negative pressure requirements
60.753(c)	Wellhead operational standards
60.753(d)	Surface monitoring standards
60.753(e)	Collection or control system shutdown
60.753(f)	Operate control or treatment system
60.753(g)	Corrective action for operational parameters

- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart AAAA, including the following sections:

63.1960	Compliance demonstration, deviations, SSM plan
63.1965	What constitutes a deviation

- (3) The permittee shall cover and compact asbestos wastes in accordance with the following requirements:

- a. As soon as practical after the placement, but no later than the end of each working day, the non-regulated Category I or II asbestos-containing waste shall



be covered with at least 12 inches of non-asbestos-containing materials. Once the asbestos-containing materials are covered, the area shall be compacted.

- b. Care shall be taken to ensure that the disposed non-regulated Category I or II asbestos-containing wastes are not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately re-covered in accordance with the provisions of this permit.
 - c. The non-regulated Category I or II asbestos-containing waste materials shall be separated from the landfill final grade by no less than 24 inches of compacted non-asbestos-containing materials; or by at least 6 inches of compacted non-asbestos-containing materials where a permanent cover of vegetation is established over the area; or in accordance with current requirements for closure, whichever is more stringent.
- (4) The permittee shall ensure that solid wastes are deposited, spread, and compacted in such a manner as to minimize or prevent visible emissions of fugitive dust. The permittee shall require all truckloads of solid waste to be unloaded in a manner that will minimize the drop height of the solid wastes. Any dusty materials or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in order to minimize or eliminate visible emissions of fugitive dust. Watering shall be conducted in such a manner as to avoid the pooling of liquids and runoff. No dusty material shall be dumped during periods of high wind speed, unless the material has been treated to prevent fugitive dust emissions from becoming airborne.
 - (5) The permittee shall employ best available control measures for the above-identified landfill fugitive dust operations/sources for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee maintains that the inherent moisture content of the materials involved in fugitive dust operations/sources is at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available control measures to ensure compliance.
 - (6) The above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the fugitive dust operation/sources until further observation confirms that use of the control measure(s) is unnecessary.
 - (7) Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- d) **Monitoring and/or Recordkeeping Requirements**
 - (1) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart WWW, including the following sections:



60.754(b)	NMOC emission rate calculation after installation of collection and control system
60.755(a)(1)	Gas generation flow rate calculation to determine compliance
60.755(a)(2)	Determining sufficient density of gas collectors
60.755(a)(3)	Gas collection system monitoring and corrective action
60.755(a)(5)	Well monitoring and corrective action
60.755(c)	Surface monitoring procedures and corrective actions
60.756(a)	Monitoring of active gas collection system
60.756(b)	Monitoring of enclosed combustor and open flare
60.756(c)	Records retention
60.756(f)	Surface monitoring frequency
60.758(a)	Recordkeeping requirements
60.758(b)	Recordkeeping for flare compliance demonstration and design
60.758(c)	Recordkeeping for control device parametric monitoring deviations
60.758(d)	Recordkeeping for gas collector map
60.758(e)	Recordkeeping for collection and control system exceedances

- (2) The permittee shall comply with the applicable monitoring and record keeping restrictions required under 40 CFR Part 63, Subpart AAAAA, including the following sections:

63.1960	Compliance demonstration, deviations, SSM plan
63.1965	What constitutes a deviation
63.1975	Clarification of 3-hour block averages
63.1980(a)	Recordkeeping according to 40 CFR 60, subpart WWW
63.1980(b)	Recordkeeping according to 40 CFR 63 and Table 1, NESHAP General Provisions, of this subpart including SSM plan requirements

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust resulting from any landfill operations (such as wastes unloading, covering, excavation, and wind erosion). The presence or absence of any visible emissions of fugitive dust shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and



- e. any corrective actions taken to minimize or eliminate the visible emissions.
- (4) If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- (5) The permittee shall maintain a daily operations log which records/documents any watering activity employed to minimize or eliminate visible emissions of fugitive dust for each waste dumping/placement area; the record shall include the time, the location, and the amount of water employed, in gallons
- (6) The permittee shall maintain monthly records of the following information:
 - a. the total amount of landfill gas (LFG) combusted each month in (P001 through P005) and the 2100 cfm open-flare; and
 - b. the rolling, 12-month summation of the total LFG combusted.
- (7) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of Category I or Category II asbestos-containing and nondegradable wastes, which are excluded from the landfill gas collection requirements of 40 CFR Part 60,
- (8) Subpart WWW.
- e) Reporting Requirements

- (1) The permittee shall submit semiannual reports and such other notifications and reports to Ohio EPA, Northeast District Office as required pursuant to 40 CFR Part 60, Subpart WWW, including the following sections:

60.757(a)	Initial and amended design capacity reporting
60.757(b)	NMOC emission rate reporting
60.757(c)	Collection and control system design plan reporting
60.757(d)	Closure report reporting
60.757(e)	Control equipment removal reporting
60.757(f)	Active collection system reporting
60.757(g)	Initial performance test reporting

- (2) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 63, Subpart AAAA, including the following sections:



63.1980(a)	Semiannual reports according to 40 CFR 60, subpart WWW
63.1980(b)	Reporting according to 40 CFR 63 and Table 1, NESHAP General Provisions, of this subpart including SSM plan requirements

- (3) 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.
- (4) The permittee shall submit quarterly written reports that (a) identify all days during which any visible emissions of fugitive dust from materials were observed from operations involving this emissions unit (such as wastes unloading, covering, excavation and wind erosion) and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the director (the Ohio EPA Northeast District Office) by January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.
- (5) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. alleceedances of the rolling, 12-month, limitation for the LFG combusted.

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

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 The open-flare shall be designed to meet 0.37 lb/mmBtu of CO emissions.

Applicable Compliance Method:
 Compliance shall be demonstrated by the manufacturer's emission factor for this emissions unit.
 - b. Emission Limitation:
 The open-flare shall be designed to meet 0.068 lb/mmBtu of NO_x emissions.

Applicable Compliance Method:
 Compliance shall be demonstrated by the manufacturer's emission factor for this emissions unit.



c. Emission Limitation:

SO₂ emissions from the 2100 cfm open-flare shall not exceed 18.6 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = [(F \times C \times 64 \times 1) / (R \times T \times 10^6)] / 2000$$

where:

E = emission rate, ton/year;
F = flow rate of LFG, cf/year;
C = concentration of sulfur in LFG, ppmv, assumed to be 200;
64 = molecular weight of SO₂, lb/lbmole;
1 = pressure, atm;
R = gas constant, 0.7302 atm ft³/lbmole^oR;
T = temperature of LFG, 520 degrees ^oR;
10⁶ = conversion factor for ppmv; and
2000 = conversion factor, lbs/ton.

d. Emission Limitation:

PM/PM₁₀ emissions from the 2100 cfm open-flare shall not exceed 4.69 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = EF \times F \times MF / 2000$$

where:

E = emission rate, tons/year;
EF = emission factor from AP-42, Section 2.4 MSW Landfills, 17 lb/10⁶ ft³ of CH₄;
F = flow rate of LFG, cf/year;
MF = methane fraction of LFG that is CH₄, 0.50; and
2000 = conversion factor, lbs/ton.

e. Emission Limitation:

HCl emissions from the 2100 cfm open-flare shall not exceed 2.23 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = [(F \times C \times 36.5 \times 1) / (R \times T \times 10^6)] / 2000$$



where:

E = emission rate, tons/year;
F = LFG flow; cf LFG/year;
C = concentration of chlorides in LFG, 42 ppmv;
36.5 = molecular weight of HCl, lb/lbmole;
1 = pressure, atm;
R = gas constant, 0.7302 atm ft³/lbmole^oR;
T = temperature of LFG, 520 degrees ^oR;
10⁶ = conversion factor for ppmv; and
2000 = conversion factor, lbs/ton.

f. Emission Limitation:

NMOC emissions from the 2100 cfm open-flare shall not exceed 1.48 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$E = [(F \times C \times 86 \times 1)/(R \times T \times 10^6)] \times (1-0.98)/2000$$

where:

E = emission rate, ton/year;
F = flow rate of combustor, cf/year;
C = concentration of sulfur in LFG, ppmv, assumed to be 595;
86 = molecular weight of NMOC, lb/lbmole;
1 = pressure, atm;
R = gas constant, 0.7302 atm ft³/lbmole^oR;
T = temperature of LFG, 520 degrees ^oR;
10⁶ = conversion factor for ppmv;
0.98 = destruction efficiency required by control device of NMOC, 98%; and
2000 = conversion factor, lbs/ton.

g. Emission Limitation:

Visible particulate emissions of fugitive dust (material transfer, aggregate handling, load-in/load-out operations and wind erosion) from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated by visible particulate 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03(B)(3).



h. Emission Limitation:

Fugitive particulate emissions shall not exceed 0.38 ton per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the emission factor equations in section 13.2.4, in compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1(revised 11/2006) for Aggregate Handling and Storage Piles.

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.754(d)	Flare Performance test methods
60.754(e)	Net heating value for performance test
60.755(d)	Surface monitoring instrumentation specifications and procedures

g) **Miscellaneous Requirements**

- (1) The predicted maximum amount of annual LFG generated by this landfill (LANDGEM model - 2,771,128 Mcf) occurs in 2028. This exceeds the current capacity of the control equipment [five engines and 2100 cfm open-flare] of approximately (1,978,884 Mcf)].