John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

10/29/2013

Certified Mail

Scott Herman
USA Waste Geneva Landfill, Inc.
4339 Tuttle Road
Geneva, OH 44041

Facility ID: 0204030303
Permit Number: P0084225
County: Ashtabula

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Initial

Dear Permit Holder:

Enclosed is the Ohio Environmental Protection Agency (EPA)Preliminary Proposed Title V permit that was issued in draft form on 9/24/2013. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically 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. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA DAPC, Northeast District Office

Response to Comments

Facility ID:	0204030303
Facility Name:	USA Waste Geneva Landfill, Inc.
Facility Description:	Municipal Solid Waste Landfill
Facility Address:	4339 Tuttle Road Geneva, OH 44041 Ashtabula County
Permit:	P0084225, Title V Permit - Initial
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Star Beacon on 09/25/2013. The comment period ended on 10/25/2013.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: Emission Testing Frequency for P001 and P002

a. Comment: The testing section for P001 and P002 included a requirement to complete NOx, CO and VOC testing during the last year of the permit.

b. Response: The requirement to test P001 and P002 during the last year of the permit has been removed.

2. Topic: Tanks T001, T002 and T003

a. Comment: Tanks T001, T002 and T003 are exempt from NSPS Subpart Kb and also would be deminimis according to OAC rule 3745-15-15.

b. Response: Emissions units T001, T002, and T003 were removed from the list of insignificant unit subject to an applicable rule and PTI 02-1874 has been withdrawn.

PRELIMINARY PROPOSED

Division of Air Pollution Control
Title V Permit
for
USA Waste Geneva Landfill, Inc.

Facility ID:	0204030303
Permit Number:	P0084225
Permit Type:	Initial
Issued:	10/29/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
USA Waste Geneva Landfill, Inc.

Table of Contents

Authorization 1

A. Standard Terms and Conditions 2

1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance 6
4. Risk Management Plans 7
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 9
10. Reasonably Anticipated Operating Scenarios 9
11. Reopening for Cause 9
12. Federal and State Enforceability 10
13. Compliance Requirements 10
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 12
17. Off-Permit Changes 12
18. Compliance Method Requirements 13
19. Insignificant Activities or Emissions Levels 13
20. Permit to Install Requirement 13
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 14
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 15
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
30. Submitting Documents Required by this Permit 16
B. Facility-Wide Terms and Conditions 17
C. Emissions Unit Terms and Conditions 19
1. F001, Paved and unpaved roadways and parking areas 20
2. F002, MSW Landfill with Active Landfill Gas Capture and Control System 26
3. Emissions Unit Group -Non NSPS engines: P001, and P002 43
4. Emissions Unit Group -NSPS engines: P003,P004,P005,P006, ... 51

Authorization

Facility ID:	0204030303
Facility Description:	Municipal Solid Waste Landfill
Application Number(s):	A0014771, A0014772, A0048468
Permit Number:	P0084225
Permit Description:	Initial Title V operating permit for the municipal solid waste landfill operations including roadways, working face, landfill gas collection system and landfill gas-fired engines
Permit Type:	Initial
Issue Date:	10/29/2013
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	

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

USA Waste Geneva Landfill, Inc.
4339 Tuttle Road
Geneva, OH 44041

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

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

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

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

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

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

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

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

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

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

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

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

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

See A.29 below if no deviations occurred during the quarter.

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

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

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from

federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control

system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

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

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

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

5. Title IV Provisions

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

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

6. Severability Clause

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

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

7. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

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

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

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

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

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

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

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

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

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

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

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

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

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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

13. Compliance Requirements

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

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

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

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

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

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

c) The permittee shall submit progress reports to the 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.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

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

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

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

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

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

14. Permit Shield

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

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

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

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in

response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

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

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

17. Off-Permit Changes

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

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

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

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

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

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

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

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

18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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

21. Air Pollution Nuisance

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

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

22. Permanent Shutdown of an Emissions Unit

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

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

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

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

23. Title VI Provisions

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

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

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

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

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

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

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theOhio 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention RequirementsUnder State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original

strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

30. Submitting Documents Required by this Permit

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 ofan 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 Ohio EPA DAPC, Northeast District Office, 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

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) B.2

2. The following insignificant emissions unit is located at this facility:

   F003 - Soil Stockpiles (PTI 02-1874)

   Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

C. Emissions Unit Terms and Conditions

1. F001, Paved and unpaved 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3) (P0112295 effective 5/23/2013)	**Unpaved Roadways and Parking Areas** 25.17 tons/12-month period of fugitive particulate matter of 10 microns or less (PM_{10}) and 93.25 tons/12-month period of fugitive particulate emissions (PE) No visible PE except for 3 minutes during any 60-minute period from any unpaved roadway or parking area. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b)(2)a through b)(2)f.) **Paved Roadways and Parking Areas** 0.14 ton/year of fugitive particulate matter of 10 microns or less (PM_{10}) and 0.68 ton/year of fugitive particulate emissions (PE) No visible PE except for 1 minute during any 60-minute period from any paved roadway or parking area.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	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).
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).

(1) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance.

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

b. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. 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 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.

d. 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.

e. 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.

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 requirements of OAC rule 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Roadway segment or area	minimum inspection frequency
unpaved roadways and parking areas	once per operating day
paved roadways and parking areas	once per operating day

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.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(2) 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.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

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

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

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

c. the dates the control measures were implemented; and

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

The information required above shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) 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.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(2) The deviation 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 Limitations:

Unpaved Roadways and Parking Areas

Fugitive PM_{10} emissions shall not exceed 25.17 tons/12-month period.

Fugitive PE emissions shall not exceed 93.25 tons/12-month period.

Applicable Compliance Method:

Compliance with the fugitive PE and PM_{10} emission limitations shall be demonstrated based upon the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways.

Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits were based on a maximum of

77,651.8 vehicle miles traveled per year on 1.7 miles of road for daily cover and construction soil hauling, 29,325 vehicle miles traveled per year on 0.30 mile of road for waste hauling on working face, 87,975 vehicle miles traveled per year on 0.90 mile of road for waste hauling on unpaved perimeter roads, using 95% control efficiency for PE and PM_{10} on unpaved perimeter roadways and 75% control efficiency for PE and PM_{10} on working face and soil hauling roadways.

b. Emission Limitations:

Paved Roadways and Parking Areas

Fugitive PM10 emissions shall not exceed 0.14 ton/year.

Fugitive PE emissions shall not exceed 0.68 ton/year.

Applicable Compliance Method:

Compliance with the fugitive PE and PM_{10} emission limitations shall be demonstrated based upon the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 01/11) for paved roadways.

Should further updates in AP-42 occur, the most current equations for paved roads shall be used. These emission limits were based on a maximum of 19,550 vehicle miles traveled per year on 0.20 mile of road for vehicle miles traveled per year for waste hauling on paved entry and perimeter roads, using 95% control efficiency for PE and PM_{10}.

c. Emission Limitation:

No visible PE from paved roadways and parking areas except for a period of time not to exceed 1 minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources").

d. Emission Limitation:

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

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

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. F002, MSW Landfill with Active Landfill Gas Capture and Control System

Operations, Property and/or Equipment Description:

Municipal Solid Waste (MSW) landfill operations - waste disposal activities including placement, spreading, compacting, and covering; soil handling activities including cell construction; and gas generation. The landfill is not permitted to accept regulated asbestos-containing waste. The landfill is permitted for 1,500 tons per day AMDWR and a design capacity of 19,356,900 cubic yards (corresponding to approximately 17,421,210 tons). The active landfill gas capture and collection system includes one (1) 2,000-cfm open flare. Alternatively, the landfill gas may be combusted at the onsite engine plant (approved in Permit Nos. P0106559 and P0111476).

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3)	The NMOC requirements of this rule are equivalent to the 40 CFR Part 60, Subpart WWW requirements as specified below. The HAP requirements of this rule are equivalent to the 40 CFR Part 63, Subpart AAAA requirements as specified below. The GCCS is designed to capture and destroy NMOC as a surrogate for HAP emissions. **Fugitive emissions from the landfill hill:** Visible emissions of non-asbestos fugitive dust (waste handling, placement, spreading, compacting, and soil loading, unloading, spreading and compacting including cell construction) from this emissions unit shall not exceed 20% opacity as a 3-minute average. Fugitive particulate emissions (PE) from waste handling, placement, spreading, compacting, and soil loading, unloading, spreading and compacting

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		including cell construction shall not exceed 8.95 tons per 12-month period. Fugitive volatile organic compound (VOC) emissions from the landfill shall not exceed 10.1 tons per 12-month period. See b)(2)h. **2,000 cfm Open Flare** Carbon monoxide (CO) emissions shall not exceed 0.37 lb/mmBtu from the open flare. Nitrogen oxide (NO_x) emissions shall not exceed 0.068 lb/mmBtu from the open flare. Sulfur dioxide (SO_2) emissions shall not exceed 5.98 lbs/hr from the open flare.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions with an average diameter of 10 microns or less (PM_{10}) shall not exceed 1.10 lbs/hr and 4.83 tons per year from the open flare. All PE from the open flare is PM_{10}. VOC emissions shall not exceed 0.13 lb/hr and 0.55 ton per year from the open flare. See b)(2)l.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)m.
d.	40 CFR Part 60, Subpart WWW (60.750 – 60.759) [In accordance with 40 CFR Part 60.752, this emissions unit is a municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991 having a design capacity greater than 2.5 million Mg and a NMOC emission rate of greater than 50 Mg/yr, and is subject to the emissions limitations/	There shall be no visible particulate emissions from the open flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. The open flare shall be designed and operated in accordance with 40 CFR 60.18. (*treatment system*) The permittee shall route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR Part 60.752(b)(2)(iii)(A). The landfill gas-fired generator set located at this facility and permitted separately combust gas from the treatment system.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	control measures specified in this section.]	See b)(2)a.
e.	40 CFR Part 63, Subpart AAAA (63.1930 – 63.1990) [In accordance with 40 CFR Part 63.1935, this emissions unit is a municipal solid waste landfill that has accepted waste since November 8, 1987 and has a design capacity greater than 2.5 million Mg and a NMOC emission rate of greater than 50 Mg/yr.]	See b)(2)b.
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 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).
h.	OAC chapter 3745-19	See b)(2)c.
i.	OAC rule 3745-20-02 OAC rule 3745-20-06	This landfill shall not accept regulated asbestos-containing materials (RACM). Deposition and burial operations of any suspected non-regulated asbestos-containing waste or demolition debris shall be conducted in a manner that prevents any asbestos content from being broken up or dispersed before such materials are buried. See b)(2)i and b)(2)j.
j.	OAC rule 3745-20-07(D)	See b)(2)d.

(2) Additional Terms and Conditions

a. 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. Additional 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 gas collection systems
60.752(b)(2)(v)	Provisions for capping or removal of a 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

b. 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. Additional 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

c. There shall be no open burning, in violation of OAC chapter 3745-19, at this facility.

d. If this landfill is permanently closed, the permittee shall comply with all of the applicable provisions of OAC rule 3745-20-07.

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

i. waste unloading;

ii. waste spreading and grading;

iii. waste compacting;

iv. soil loading and unloading;

v. soil spreading and grading for daily cover, intermediate cover and cell construction; and

vi. soil compacting for daily cover, intermediate cover and cell construction.

f. 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.

g. 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 affirms 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.

h. The annual fugitive VOC emission limitation 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. 40 CFR 60.750 et seq. (NSPS, Subpart WWW) addresses NMOC emissions; therefore, the monitoring, record keeping, and reporting requirements of this permit will reflect NMOC rather than VOC.

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 chapter 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 Category I nonfriable asbestos-containing waste materials accepted for disposal will not be subjected to sanding, grinding, cutting, or abrading and shall not become friable during processing at the landfill; and shall ensure that Category II nonfriable 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. Any nonfriable Category I or Category II asbestos-containing material that was generated from a NESHAP source and which becomes friable, also becomes subject to the Asbestos NESHAP regulations. If any regulated 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. cause or permit no visible emissions to the outside air from the asbestos-containing waste materials during on-site transportation, transfer, deposition, or compacting operations;

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

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

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

k. The emission limitations for the open flare has been established based upon the maximum flow rate of 2,000 scfm and the expected landfill gas quality. The landfill's potential to emit as predicted by USEPA's Landfill Gas Estimation Model (LandGEM), AP-42 emission factors, and standard industry assumptions are expected to occur after the year 2018 if the facility were to accept its authorized maximum daily waste each day. 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 is greater than 90 percent of the existing flare capacity, as an annual average; and

ii. the collection system must be expanded in accordance with 40 CFR 60.753 and/or 60.755, and the newly collected LFG volume is anticipated to exceed the current flare capacity.

l. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 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, the requirements of 3745-31-05(A)(3) as effective December 1, 2006 will no longer apply.

m. 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 PM_{10} and VOC emissions from the open flare as the emissions are less than 10 tons per year.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the 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. NMOC, and methane are air contaminants that do not involve an established NAAQS.

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

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(A)(1)]

(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	Deviation defined

[Authority for term: 40 CFR Part 63, Subpart AAAA, P0112295 and OAC rule 3745-77-07(A)(1)]

(3) The maximum daily waste receipts for this emissions unit shall not exceed 1,500 tons.

[Authority for term: P0112295 and OAC rule 3745-77-07(A)(1)]

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

a. As soon as practical after the placement of asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day 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 disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of this permit.

c. 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 with a permanent cover of vegetation over the area, or in accordance with current requirements for closure, whichever is more stringent.

[Authority for term: P0112295 and OAC rule 3745-77-07(A)(1)]

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)	Record keeping requirements
60.758(b)	Record keeping for flare compliance demonstration and design
60.758(c)	Record keeping for control device parametric monitoring deviations
60.758(d)	Record keeping for gas collector map
60.758(e)	Record keeping for collection and control system exceedances

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(C)(1)]

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

63.1960	Compliance demonstration, deviations, SSM plan
63.1965	Deviation defined
63.1975	Clarification of 3-hour block averages
63.1980(a)	Record keeping according to 40 CFR Part 60, Subpart WWW
63.1980(b)	Record keeping according to 40 CFR Part 63 and Table 1, NESHAP General Provisions, of this subpart including SSM plan requirements

[Authority for term: 40 CFR Part 63, Subpart AAAA, P0112295 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall identify and record each instance that the flare was not in operation when the landfill gas was not being routed to the treatment system.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(4) 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
waste handling and placement	once during each day of operation
waste spreading, grading and compaction	once during each day of operation
soil spreading, grading and compaction	once during each day of operation
soil handling for cell construction	once during each day of operation

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.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(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 placement area.

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 or due to the facility is closed;

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 control measures were required but not implemented.

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

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(6) 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).

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(C)(1)]

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 submittal
60.757(d)	Closure report requirements
60.757(e)	Control equipment removal reporting

60.757(f)	Active collection system reporting
60.757(g)	Initial performance test reporting

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: 40 CFR Part 63, Subpart AAAA, P0112295 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly deviation (excursion) reports that include the following information:

a. each day during which a fugitive dust inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit annual reports that include:

a. the total waste acceptance, in tons per year; and

b. the total VOC emissions, and LandGEM inputs and output files, updated for the previous year's waste receipts.

Submitting the complete Fee Emission Report, including the LandGEM input and output files, in a timely manner will satisfy the annual report requirement above.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

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. <u>Emission Limitation</u>:

Visible emissions of non-asbestos fugitive dust (waste handling, placement, spreading, compacting, and soil loading, unloading, spreading and compacting including cell construction) from this emissions unit shall not exceed 20% opacity as a 3-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"), 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). This compliance method shall be used whenever a compliance determination is warranted.

b. Emission Limitation:

Fugitive VOC emissions from the landfill shall not exceed 10.1 tons per 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated based on the following equation:

E = F x 39 % x (1 – PC)

where:

E = emissions of fugitive VOC, in tpy;

F = NMOC mass generation rate for the current year or 12-month period, as predicted by LandGEM, multiplied by 1.25; (a predicted maximum total flow rate of NMOC at peak year 2004 predicted by the LANDGEM model was used to develop this limitation);

39% = the fractional portion of VOC in NMOC according to AP-42, Section 2.4 MSD Landfills, Table 2.4-2; and

PC = estimated fractional capture efficiency of NMOC by collection/control system, assumed to be 85% based upon site-specific data.

The LANDGEM model annual waste acceptance rate was limited to 391,000 tons per year for the purpose of developing emission limitations. Historical and current actual waste acceptance rates will be used in the LandGEM model to calculate quantity “F”, using an assumed NMOC concentration of 600 ppmv. Alternatively, the actual NMOC concentration determined from a sample of the landfill gas in the header may be used.

c. Emission Limitation:

Fugitive PE from waste handling, placement, spreading, compacting, and soil loading, unloading, spreading and compacting including cell construction shall not exceed 8.95 tons per 12-month period.

Applicable Compliance Method:

Compliance with fugitive PE and PM_{10} emission limitations for soil and waste handling activities shall be determined by using the emission factor equations in AP-42 Section 13.2.4 (revised 11/06). Compliance with fugitive PE limitations for grading and compaction shall be determined by using the emission factor equations in AP-42 Section 11.9 (revised 7/98). Should further updates in AP-42 occur, the most current equations shall be used.

$$E_t = E_{WH} + E_{WG} + E_{WC} + E_{SH} + E_{SG} + E_{SC}$$

where:

E_t = total fugitive particulate emissions from the landfill (F002), in tpy;
E_{WH} = emissions from waste handling, in tpy;
E_{WG} = emissions from waste grading, in tpy;
E_{WC} = emissions from waste compaction, in tpy;
E_{SH} = emission from soil handling, in tpy;
E_{SG} = emissions from soil grading, in tpy; and
E_{SC} = emissions from soil compaction, in tpy.

$$E_{WH} = k \times 0.0032\ [(U/5)^{1.3}/(M/2)^{1.4}] \times T \times (1 - CE)/\ 2{,}000$$

where:

U = mean wind speed, mph (assumed 10.5);

M = material moisture content, % (14.2% per Table 13.2.4-1);

0.0032 = equation constant;

K = particle size multiplier for <30 μm size, unitless (0.74 for PE, 0.35 for PM_{10});

T = waste handled per year, tons (no more than 547,500 tons/yr based on 1,500 tons/day limit, 1 transfer per ton, no more than 365 days/yr);

CE = fractional control efficiency, dimensionless (assumed 0.25 for lowdrop height); and

2,000 = lbs/ton.

$$E_{WG} = 0.040 \times S^{2.5} \times VMT_{WG} \times DAY_{WG} / 2{,}000$$

where:

S = mean vehicle speed, mph (assumed 1.0);

VMT_{WG} = daily vehicle miles travelled during grading operations, miles (assumed 9.5 based on 1.0 mph x 9.5 hours/day);

DAY_{WG} = operating days for vehicle employed in grading operations, days (no more than 365); and

2,000 = lbs/ton.

$$E_{WC} = [((5.7 \times s^{1.2})/M^{1.3}) - CF] \times HR_{WC} / 2{,}000$$

where:

s = material silt content, % (assumed 10.0);

M = material moisture content, % (assumed 15.0);

CF = correction factor, unitless (1.0 per AP-42 Table 13.2.3-1 (1/95));

HR_{WC} = operating hours for vehicle employed in waste compaction operations, hours (no more than 3,467.5 based on 9.5 hours/day, 365 days/yr); and

2,000 = lbs/ton.

$$E_{SH} = k \times 0.0032\ [(U/5)^{1.3}/(M/2)^{1.4}] \times T \times (1 - CE)/ 2{,}000$$

where:

U = mean wind speed, mph (assumed 10.5);

M = material moisture content, % (14.2% per Table 13.2.4-1);0.0032 = equation constant;

k = particle size multiplier for <30 μm size, unitless (0.74 for PE, 0.35 for PM-10);

T = soil handled per year, tons (assumed no more than 1,827,102.4 tons/yr based on 2,502.88 tons/day, 2 transfers per ton, 365 days/yr);

CE = fractional control efficiency, dimensionless (assumed 0.25); and

2,000 = lbs/ton.

$$E_{SG} = 0.040 \times S^{2.5} \times VMT_{SG} \times DAY_{SG} / 2{,}000$$

where:

S = mean vehicle speed, mph (assumed 1.0);

VMT_{SG} = daily vehicle miles travelled during grading operations, miles (assumed 36.0 based on 1.0 mph x 3 vehicles x 12 hours/day);

DAY_{SG} = operating days for vehicle employed in grading operations, days (no more than 365); and

2,000 = lbs/ton

$$E_{SC} = [((5.7 \times s^{1.2})/M^{1.3}) - CF] \times HR_{SC} \times (1 - CE) / 2{,}000$$

where:

s = material silt content, % (assumed 47.0 from onsite samples);

M = material moisture content, % (assumed 13.0 from onsite samples);

CF = correction factor, unitless (1.0 per AP-42 Table 13.2.3-1 (1/95));

HR_{SC} = operating hours for vehicle employed in waste compaction operations, hours (assumed no more than 1,095 based on 3 hours/day, 365 days/yr);

CE = fractional control efficiency, dimensionless (assumed 0.50), and

2,000 = lbs/ton

d. Emission Limitation:

CO emissions shall not exceed 0.37 lb/mmBtu from the open flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be demonstrated by the CO emission factor of 0.37 lb/mmBtu from AP-42, Section 13.5 Industrial Flares, Table 13.5-1 (9/31).

e. Emission Limitation:

NO_x emissions shall not exceed 0.068 lb/mmBtu from the open flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be demonstrated by the NO_x emission factor of 0.068 lb/mmBtu from AP-42, Section 13.5 Industrial Flares, Table 13.5-1 (9/91).

f. Emission Limitation:

SO_2 emissions shall not exceed 5.98 lbs/hr from the open flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be calculated by the equation below:

E= [(Q x (300 ppmv/1,000,000 MMscf/scf) x (64.066 molecular weight of SO2)/(386 scf/lb-mol LFG)] x (60 min/hr)

where:

E = emission rate, in pound per hour;

Q = actual landfill gas flowrate to the flare, dscf/hr, i.e., 2000 scfm maximum;

300 ppmv = sulfur concentration in landfill gas from site-specific landfill gas data; and

386 = the mass volume of landfill gas, in scf/lb-mol at standard temperature.

g. Emission Limitation:

PM_{10} emissions shall not exceed 1.10 lbs/hr and 4.83 tons per year from the open flare. All PE from the open flare is PM_{10}.

Applicable Compliance Method:

Compliance with the short term emission limitation may be calculated by the equation below:

E = EF x Q x PM x 60

where:

E = emission rate, lb/hr;

EF = emission factor from AP-42, Section 2.4 MSW Landfills (11/98), 17 lbs/10^6dscf of CH_4;

Q = actual landfill gas flowrate to the flare, dscf/hr, i.e., 2000 scfm maximum;

PM = fractional portion of LFG that is CH_4; 0.54 site-specific value was used in developing the permit limitations; and

60 = conversion factor, minutes/hour.

h. Emission Limitation:

VOC emissions shall not exceed 0.13 lb/hr and 0.55 ton per year from the open flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be calculated by the equation below:

E = [(Q x (595* ppmv/1,000,000 MMscf/scf x 39 percent) x (86.18 molecular weight of NMOC as hexane)/(386 scf/lb-mol LFG)] x [(60 min/hr)(1 – 0.98)]

where:

E = emission rate, in pound per hour;

Q = actual landfill gas flow rate to the flare, i.e., 2000 scfm maximum;

595 ppmv = default NMOC concentration in landfill gas from AP-42, Section 2.4 MSW Landfills. Alternatively, the actual NMOC concentration determined from a sample of the landfill gas in the header may be used.

39% = the factional portion of VOC in NMOC according to AP-42, Section 2.4 MSD Landfills, Table 2.4-2;

386 = the mass volume of landfill gas, in scf/lb-mol at standard temperature; and

98 % = is the assumed VOC destruction efficiency of the open flare.

i. Emission Limitation:

There shall be no visible particulate emissions from the open flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance with the visible emissions limitation shall be determined in accordance with U.S. EPA Method 22 in Appendix A of 40 CFR Part 60. The observation period is 2 hours and shall be used according to Method 22.

[Authority for term: P0112295 and OAC rule 3745-77-07(C)(1)]

(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

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

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

60.754(c)	PSD applicability

[Authority for term: 40 CFR Part 60, Subpart WWW, P0112295 and OAC rule 3745-77-07(C)(1)]

3. Emissions Unit Group -Non NSPS engines: P001, and P002

EU ID	Operations, Property and/or Equipment Description
P001	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #1.
P002	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #2.

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) d)(7)

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) OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (P0115085 effective 8/2/13)	Visible particulate emissions shall not exceed 10% opacity as a 6-minute average. Carbon monoxide (CO) emissions shall not exceed 6.85 pounds per hour. Nitrogen oxides (NO_x) emissions shall not exceed 3.67 pounds per hour. See b)(2)c.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	Particulate emissions (PE) and particulate less than 10 microns in diameter (PM_{10}) emissions shall not exceed 0.52 pound per hour and 2.27 tons per year. Sulfur dioxide (SO_2) emissions shall not exceed 1.0 pound per hour and 4.36 tons per year. Volatile organic compound (VOC) emissions shall not exceed 0.55 pound per hour and 2.41 tons per year. See b)(2)a.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)b.
d.	OAC rule 3745-17-11(B)(5)	Particulate emissions (PE) shall not exceed 0.062 pound per million Btu of actual heat input.
e.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-18-06	Sulfur dioxide (SO_2) emissions shall not exceed 0.5 pound per million Btu of actual heat input.
g.	40 CFR Part 60, Subpart JJJJ (40 CFR 60.4230 – 60.4248)	In accordance with 40 CFR 60.4230(a)(4)(ii), this emissions unit is a landfill gas fired lean burn stationary spark ignition (SI) internal combustion engine (ICE) constructed before June 12, 2006 and manufactured before January 1, 2008 with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP. Therefore, until this emissions unit is modified or reconstructed, the requirements of Subpart JJJJ do not apply.
h.	40 CFR Part60, Subpart WWW	See b)(2)d.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 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 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. 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) do not apply to the PE/PM_{10}, SO_2 and VOC emissions from this air contaminant source since the uncontrolled potential to emit for PE/PM_{10}, SO_2 and VOC are less than 10 tons per year.

c. The internal combustion engine shall operate using lean burn technology.

d. The permittee has committed to treating all landfill gas prior to processing through this emissions unit in accordance with the requirements specified in 40 CFR 60.752(b)(2)(iii)(C).

c) Operational Restrictions

(1) This emissions unit shall burn only treated landfill gas.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(A)(1)]

(2) The permittee shall install, maintain and operate according to the manufacturer's specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

[Authority for term: P0115085 and OAC rule 3745-77-07(A)(1)]

(3) The flow rate to the internal combustion engines shall not exceed 1998 scfm of treated landfill gas.

[Authority for term: P0115085 and OAC rule 3745-77-07(A)(1)]

(4) Collected landfill gas shall be compressed, dewatered and filtered to satisfy the requirements for "treated" landfill gas. The owner or operator shall operate and maintain the treatment system (compressor, dewatering and filtering systems) in accordance with the manufacturer's recommendations.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving each emissions unit. The presence or absence of any visible emissions shall be noted in an operations log for each unit. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the cause of the visible emissions;

c. the total duration of any visible emissions incident; and

d. any corrective actions taken to eliminate the visible emissions.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall monitor the following parameters of the landfill gas treatment system:

a. inlet and outlet pressure of the landfill gas compressor; and

b. temperature differential across the heat exchanger.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall install, calibrate and maintain a device that monitors and records gas flow to the internal combustion engines, as a group. The gas flow rate measuring device shall record the flow to the control device at least every 15 minutes.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall monitor and record the downtime of each engine, individually.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(5) The permittee shall collect and record each day all times the maximum allowable landfill gas flow rate to the internal combustion engines was exceeded.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(7) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new Permit to Install.

[Authority for term: P0115085, OAC rule 3745-114-01 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. describe any corrective actions taken to eliminate the visible particulate emissions; and

c. identify the date(s) and duration the gas flow rate to the internal combustion engines exceeded the maximum gas flow rate of 1998 scfm of treatedLFG;

These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than treated landfill gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

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:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

CO emissions shall not exceed 6.85 pounds per hour.

Applicable Compliance Method:

Compliance with the CO hourly emission and technical limitations was determined in accordance with the performance test requirement specified in the initial permit to install. If required, compliance with the CO emission limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in Method 10 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

NO_x emissions shall not exceed 3.67 pounds per hour.

Applicable Compliance Method:

Compliance with the NO_x hourly emission limitations was determined in accordance with the performance test requirement specified in the initial permit to

install. If required, compliance with the NO_x emission limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in Method 7 or 7E of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

PE/PM_{10} emissions shall not exceed 0.52 pound per hour and 2.27 tons per year.

Applicable Compliance Method:

Compliance with the PE/PM_{10} hourly emission limitations shall be determined in accordance with the following equation:

E = EF x Q x MC x 60

where:

E = emission rate of PE/PM_{10}, pounds per hour;

EF = emission factor from AP-42, Section 2.4, Municipal Solid Waste Landfills, Table 2.4-4, version 11/1998, 48 lb PM/mmdcsf CH_4;

Q = average flow rate of LFG into engine, cfm;

MC = average methane content of LFG; and

60 = conversion factor, minutes per hour.

The tpy emission limitation was developed by multiplying the short-term allowable PE/PM_{10} emission limitation (0.52 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

SO_2 emissions shall not exceed 1.0 pound per hour and 4.36 tons per year.

Applicable Compliance Method:

Compliance with the SO_2 hourly emission limitation shall be determined by using the following equation:

E = (EF x MW x Q)/(24.45 x 35.31 x 1000 x 454)

where:

E = emission rate, pounds per hour;

EF = SO_2 contained in the LFG (per facility 300 ppm), ppm;

MW = molecular weight of SO_2, 64.06;

Q = flow of LFG to engine per hour, ft^3 per hour;

24.45 = conversion factor from ppm to mg/m^3, (mg/m^3 = ppm x MW/24.45);

35.31 = conversion factor, ft^3 per m^3;

1000 = conversion factor, mg per gram; and

454 = conversion factor, grams per pound.

The tpy emission limitation was developed by multiplying the short-term allowable SO_2 emission limitation (1.0 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

VOC emissions shall not exceed 0.55 pound per hour and 2.41 tons per year.

Applicable Compliance Method:

Compliance with the VOC hourly emission and technical limitations was determined in accordance with the performance test requirement specified in the initial permit to install. If required, compliance with the VOC emission limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in Method 18 or Method 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.55 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

PE shall not exceed 0.062 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, compliance with the PE pound per million Btu of actual heat input limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5.

h. Emission Limitation:

Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

i. Emission Limitation:

SO_2 emissions shall not exceed 0.5 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, compliance with the SO_2 pound per million Btu of actual heat input limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group -NSPS engines: P003,P004,P005,P006,

EU ID	Operations, Property and/or Equipment Description
P003	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #3.
P004	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #4.
P005	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #5.
P006	Caterpillar 3516 Reciprocating Internal Combustion Engine (1,148 bhp) operating on landfill gas. Engine #6.

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) d)(8)

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) OAC rule 3745-31-05(A)(3) (P0115085 effective 8/2/13)	Visible particulate emissions shall not exceed 10% opacity as a 6-minute average. Carbon monoxide (CO) emissions shall not exceed 6.85 pounds per hour. Nitrogen oxides (NO_x) emissions shall not exceed 3.67 pounds per hour. See b)(2)c.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	Particulate emissions (PE) and particulate less than 10 microns in diameter (PM_{10}) emissions shall not exceed 0.52 pound per hour and 2.27 tons per year. Sulfur dioxide (SO_2) emissions shall not exceed 1.0 pound per hour and 4.36 tons per year.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions shall not exceed 0.55 pound per hour and 2.41 tons per year. See b)(2)a.
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/06	See b)(2)b.
d.	OAC rule 3745-17-11(B)(5)	Particulate emissions (PE) shall not exceed 0.062 pound per million Btu of actual heat input.
e.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
f.	OAC rule 3745-18-06	Sulfur dioxide (SO_2) emissions shall not exceed 0.5 pound per million Btu of actual heat input.
g.	40 CFR Part 60, Subpart JJJJ (40 CFR 60.4230 – 60.4248) [In accordance with 40 CFR 60.4230(a)(4)(ii), this emissions unit is a landfill gas fired lean burn stationary spark ignition (SI) internal combustion engine (ICE) constructed after June 12, 2006 and manufactured after January 1, 2008 with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP]	Emission standards for landfill gas SI-ICE manufactured after January 1, 2008 as specified in Table 1 of 40 CFR Part 60, Subpart JJJJ. NO_x: 3.0 grams per horsepower-hour or 220 ppmvd at 15% oxygen. CO: 5.0 grams per horsepower-hour or 610 ppmvd at 15% oxygen. VOC: 1.0 gram per horsepower-hour or 80 ppmvd at 15% oxygen The NO_x, CO and VOC emission limitations established in this subpart are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).
h.	40 CFR Part 63, Subpart ZZZZ	See b)(2)d.
i.	40CFR Part60, Subpart WWW	See b)(2)f.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 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 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. 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) do not apply to the PE/PM_{10}, SO_2 and VOC emissions from this air contaminant source since the uncontrolled potential to emit for PE/PM_{10}, SO_2 and VOC are less than 10 tons per year.

c. The internal combustion engine shall operate using lean burn technology.

d. In accordance with 40 CFR, Part 63.6590(c), new stationary RICE located at an area source must meet the requirements of this subpart by meeting the requirements of 40 CFR Part 60, Subpart JJJJ.

e. The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4236(b)	Installation deadlines
60.4243(b)	Compliance Requirements

f. The permittee has committed to treating all landfill gas prior to processing through this emissions unit in accordance with the requirements specified in 40 CFR 60.752(b)(2)(iii)(C).

c) Operational Restrictions

(1) This emissions unit shall burn only treated landfill gas.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(A)(1)]

(2) The permittee shall install, maintain and operate according to the manufacturer's specifications a device at the inlet to the internal combustion engine which completely shuts off gas flow to the internal combustion engine when the internal combustion engine is not operating.

[Authority for term: P0115085 and OAC rule 3745-77-07(A)(1)]

(3) The flow rate to the internal combustion engines shall not exceed 1998 scfm of treated landfill gas.

[Authority for term: P0115085 and OAC rule 3745-77-07(A)(1)]

(4) Collected landfill gas shall be compressed, dewatered and filtered to satisfy the requirements for "treated" landfill gas. The owner or operator shall operate and maintain the treatment system (compressor, dewatering and filtering systems) in accordance with the manufacturer's recommendations.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(A)(1)]

(5) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4234	Duration of compliance with the emissions standards
60.4243(b)	Maintenance Requirements
60.4243(g)	Air-to-Fuel Ratio (AFR) controllers

[Authority for term: 40 CFR Part 60, Subpart JJJJ, P0115085 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving each emissions unit. The presence or absence of any visible emissions shall be noted in an operations log for each unit. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the cause of the visible emissions;

c. the total duration of any visible emissions incident; and

d. any corrective actions taken to eliminate the visible emissions.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall monitor the following parameters of the landfill gas treatment system:

a. inlet and outlet pressure of the landfill gas compressor; and

b. temperature differential across the heat exchanger.

[Authority for term: 40 CFR Part 60, Subpart WWW, P0115085 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall install, calibrate and maintain a device that monitors and records gas flow to the internal combustion engines, as a group. The gas flow rate measuring device shall record the flow to the control device at least every 15 minutes.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall monitor and record the downtime of each engine, individually.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(5) The permittee shall collect and record each day all times the maximum allowable landfill gas flow rate to the internal combustion engines was exceeded.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(7) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4243(b)(2)(ii)	Keeping a maintenance plan and records of conducted maintenance
60.4245(a)	Records required

[Authority for term: 40 CFR Part 60, Subpart JJJJ, P0115085 and OAC rule 3745-77-07(C)(1)]

(8) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new Permit to Install.

[Authority for term: P0115085, OAC rule 3745-114-01 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

b. describe any corrective actions taken to eliminate the visible particulate emissions; and

c. identify the date(s) and duration the gas flow rate to the internal combustion engines exceeded the maximum gas flow rate of 1998 scfm of treatedLFG;

These reports shall be submitted to the Northeast District Office of the Ohio EPA by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than treated landfill gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4245(c)	Initial Notification
60.4245(d)	Performance Test Report

[Authority for term: 40 CFR Part 60, Subpart JJJJ, P0115085 and OAC rule 3745-77-07(C)(1)]

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. <u>Emission Limitation</u>:

Visible particulate emissions shall not exceed 10% opacity as a 6-minute average.

<u>Applicable Compliance Method</u>:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

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

CO emissions shall not exceed 6.85 pounds per hour.

<u>Applicable Compliance Method</u>:

Compliance with the CO hourly emission and technical limitations shall be determined in accordance with the performance test requirement specified in f)(3).

c. Emission Limitation:

NO_x emissions shall not exceed 3.67 pounds per hour.

Applicable Compliance Method:

Compliance with the NO_x hourly emission limitations shall be determined in accordance with the performance test requirement specified in f)(3).

d. Emission Limitation:

PE/PM_{10} emissions shall not exceed 0.52 pound per hour and 2.27 tons per year.

Applicable Compliance Method:

Compliance with the PE/PM_{10} hourly emission limitations shall be determined in accordance with the following equation:

E = EF x Q x MC x 60

where:

E = emission rate of PE/PM_{10}, pounds per hour;

EF = emission factor from AP-42, Section 2.4, Municipal Solid Waste Landfills, Table 2.4-4, version 11/1998, 48 lb PM/mmdcsf CH_4;

Q = average flow rate of LFG into engine, cfm;

MC = average methane content of LFG; and

60 = conversion factor, minutes per hour.

The tpy emission limitation was developed by multiplying the short-term allowable PE/PM_{10} emission limitation (0.52 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

e. Emission Limitation:

SO_2 emissions shall not exceed 1.0 pound per hour and 4.36 tons per year.

Applicable Compliance Method:

Compliance with the SO_2 hourly emission limitation shall be determined in by using the following equation:

E = (EF x MW x Q)/(24.45 x 35.31 x 1000 x 454)

where:

E = emission rate, pounds per hour;

EF = SO_2 contained in the LFG (per facility 300 ppm), ppm;

MW = molecular weight of SO_2, 64.06;

Q = flow of LFG to engine per hour, ft^3 per hour;

24.45 = conversion factor from ppm to mg/m^3, (mg/m^3 = ppm x MW/24.45);

35.31 = conversion factor, ft^3 per m^3;

1000 = conversion factor, mg per gram; and

454 = conversion factor, grams per pound.

The tpy emission limitation was developed by multiplying the short-term allowable SO_2 emission limitation (1.0 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

VOC emissions shall not exceed 0.55 pound per hour and 2.41 tons per year.

Applicable Compliance Method:

Compliance with the VOC hourly emission and technical limitations shall be determined in accordance with the performance test requirement specified in f)(3).

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.55 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

PE shall not exceed 0.062 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, compliance with the PE pound per million Btu of actual heat input limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5.

h. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

i. Emission Limitation:

SO_2 emissions shall not exceed 0.5 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, compliance with the SO_2 pound per million Btu of actual heat input limitation shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4243(b)(1)	Certified engines - Compliance demonstration
60.4243(b)(2)	Non-certified engines - Compliance demonstration
60.4244	Test methods and procedures

[Authority for term: 40 CFR Part 60, Subpart JJJJ, P0115085 and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted according to the requirements of 40 CFR Part 60, Subpart JJJJ.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NO_x, CO and VOC.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

NO_x - Method 7 or 7E of 40 CFR Part 60, Appendix A;
CO - Method 10 of 40 CFR Part 60, Appendix A; and

VOC - Method 18 or Method 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the Ohio EPA Northeast District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: P0115085 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.