State of Ohio Environmental Protection Agency

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

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.ohio.gov

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

12/29/2009

Certified Mail

Facility ID: 1576181541
Permit Number: P0101478
County: Stark

Chad Abell
American Landfill Inc.
7916 Chapel Street, SE
Waynesberg, OH 44688

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

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

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

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

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Canton City Health Department

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

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

American Landfill Inc.

Facility ID: 1576181541
Permit Number: P0101478
Permit Type: Renewal
Issued: 12/29/2009
Effective: 1/19/2010
Expiration: 1/19/2015

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Title V Permit to Control Air Pollution
OAC Chapter 3745-77
American 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. Scheduled Maintenance 6
4. Risk Management Plans 6
5. Title IV Provisions 6
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 8
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 10
15. Operational Flexibility 10
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 12
22. Permanent Shutdown of an Emissions Unit 12
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 13
25. Records Retention Requirements Under State Law Only 13
26. Inspections and Information Requests 13
27. Scheduled Maintenance/Malfunction Reporting 14
28. Permit Transfers 14

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 14

B. Facility-Wide Terms and Conditions..... 15

C. Emissions Unit Terms and Conditions 22

1. F001, Paved and Unpaved Roadways and parking areas..... 23

2. P902, MSW Landfill..... 31

Authorization

Facility ID: 1576181541
Facility Description: MSW landfill allowed to dispose of Regulated Asbestos Containing Materials, solidifies liquid wastes and disposes of the resulting solid wastes, and disposes of tires in a tire monocell.
Application Number(s): A0011846, A0033267, A0033268, A0033269, A0033270
Permit Number: P0101478
Permit Description: MSW landfill operations permit TV Renewal, including incorporation of PTI Mods.
Permit Type: Renewal
Issue Date: 12/29/2009
Effective Date: 1/19/2010
Expiration Date: 1/19/2015
Superseded Permit Number:

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

American Landfill Inc.
7916 Chapel Street, S.E.
Waynesburg, OH 44688

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

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

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 Canton City Health Department. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

2. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Canton City Health Department.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

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

4. Risk Management Plans

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

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

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

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

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

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

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

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

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

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

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

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

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

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

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

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

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

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

10. Reasonably Anticipated Operating Scenarios

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

11. Reopening for Cause

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

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

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

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

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

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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

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

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

(2) Compliance certifications shall include the following:

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

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

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

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

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

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

14. Permit Shield

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

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

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

15. Operational Flexibility

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

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

16. Emergencies

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

17. Off-Permit Changes

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

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

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

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

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

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

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

18. Compliance Method Requirements

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

19. Insignificant Activities or Emissions Levels

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

20. Permit to Install Requirement

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

21. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

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

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

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

23. Title VI Provisions

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

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

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

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

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

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

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

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

pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.
(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

   a) 3.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirement contained in a permit-to-install or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18 and 3745-21.

   a) G001 - Gasoline and diesel dispensing facility

3. The following insignificant emissions units are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05.

T001	Leachate Storage Tanks, 250,000 gal and one 8,000 gal condensate tank
T002	Liquid Stabilization process
B004	1.2 MMBtu propane fired maintenance building heater
P005	Emissions from three (3) 3-inch pumps
P006	Emissions from three (3) 6-inch pumps
P009	Emissions from three (3) light plants (15 HP diesel engine)
T010	550 gallon-Outside fueling area
T011	550 gal-Outside fueling area
T012	4000 gal-Outside fueling area
T013	6000 gal-Outside fueling area
T014	275 gal-Tank Room
T015	550 gal-tank room
T016	550 gal-Tank room
T017	275 gal-Tank room
T018	550 gal-Tank room
T019	550 gal-Tank room

4. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

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

   a) National Emission Standards for Hazardous Air Pollutants (NESHAP) for existing and new municipal solid waste (MSW) landfills are established within 40 CFR Part 63, Subpart AAAA, § 63.1930. This subpart requires all landfills described in § 63.1935 to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the Startup, Shutdown, and Malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

b) Pursuant to § 63.1940, an affected source is defined as follows:

(1) An affected source of this subpart is a MSW landfill, as defined in § 63.1990, that meets the criteria in § 63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.

(2) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of Subpart A.

(3) An affected source of this subpart is existing if it is not new.

c) Based upon the above definition, American Landfill is an existing affected source. Pursuant to § 63.1945(d),"If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in § 63.1955(b) and § 63.1960 through § 63.1980 by the date your landfill is required to install a collection and control system by § 60.752(b)(2), the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later." As such, compliance with this subpart was required by January 13, 2004.

d) Pursuant to § 63.1950, the permittee is no longer required to comply with the requirements of this subpart when it is no longer required to apply controls as specified in 40 CFR §60.752(b)(2)(v).

e) Pursuant to § 63.1955, the permittee is required to comply with the requirements of 40 CFR Part 60, Subpart WWW. If you are required by 40 CFR § 60.752(b)(2) to install a collection and control system, you must comply with the requirements in § 63.1960 through § 63.1985 and with the general provisions of this part specified in Table 1 of this subpart. For approval of collection and control systems, which include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping or reporting provisions, you must follow the procedures in 40 CFR § 60.752(b)(2). If alternatives have already been approved under 40 CFR Part 60 Subpart WWW, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in 40 CFR Part 63, Subpart A as specified in Table 1 of this subpart, and all affected sources must submit compliance reports every 6 months as specified in § 63.1980(a) and (b). These reports include information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3-hour monitoring block average.

f) Pursuant to § 63.1960, compliance is determined in the same way it is determined for 40 CFR Part 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR § 60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR § 63.6 (e)(3).

A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

g) Pursuant to § 63.1965, a deviation is defined in § 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

(1) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of Subpart WWW are exceeded.

(2) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

(3) A deviation occurs when an SSM plan is not developed, implemented, or maintained on site.

h) Pursuant to § 63.1975, averages are calculated in the same way as they are calculated in 40 CFR Part 60, Subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

(1) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

(2) Startups.

(3) Shutdowns.

(4) Malfunctions.

i) Pursuant to § 63.1980(a), the permittee shall keep records and reports as specified in 40 CFR Part 60, Subpart WWW, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

j) Pursuant to § 63.1980(b), the permittee must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

k) Pursuant to § 63.1985(a), this subpart can be implemented and enforced by the U.S. EPA or Ohio EPA.

l) Pursuant to § 63.1990, terms used in this subpart are defined in the Clean Air Act, 40 CFR Part 60, Subparts A, Cc, and WWW; 40 CFR Part 62, Subpart GGG, and Subpart A of this part, and this section that follows:

(1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

a. fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;

b. fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

c. fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

(2) Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.

(3) EPA approved State plan means a State plan that EPA has approved based on the requirements in 40 CFR Part 60, Subpart B to implement and enforce 40 CFR Part 60, Subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.

(4) Federal plan means the EPA plan to implement 40 CFR Part 60, Subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR Part 62, Subpart GGG.

(5) Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see Section 257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

(6) Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

m) As stated in § 63.1955 and § 63.1980, you must meet each requirement in the following table that applies to you.

Table 1 of Subpart AAAA of Part 63: Applicability of NESHAP General Provisions to Subpart AAAA		
Part 63 Citation	**Description**	**Explanation**
63.1(a)	Applicability: general applicability of NESHAP in this part.	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources.	
63.1(e)	Title V permitting.	
63.2	Definitions.	
63.4	Prohibited activities and circumvention.	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR Part 60, Subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources.	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions.	
63.6(f)	Compliance with non-opacity emission standards…..	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR Part 60, Subpart A.
63.10(b)(2)(i)-(b)(2)(v)	General record keeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and	

Table 1 of Subpart AAAA of Part 63: Applicability of NESHAP General Provisions to Subpart AAAA		
Part 63 Citation	**Description**	**Explanation**
	malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified.	
63.15	Availability of information and confidentiality.	

C. Emissions Unit Terms and Conditions

1. F001, Paved and Unpaved Roadways and parking areas

Operations, Property and/or Equipment Description:

Fugitive dust from vehicle traffic on landfill roadways and parking areas

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 15-01601 issued 07/20/06) This Title V Renewal incorporates the Chapter 31 modification requirements of PTI 15-303 (F001) issued January 29, 1986 which is being superseded upon issuance of this Administrative Modification that corrects the references in PTI 15-01601, for F001 and P902. See Section b)(2)a. below.	Fugitive particulate emissions (PE) from all paved and unpaved roadways and parking areas shall not exceed 834 TPY. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)d. through b)(2)o. below.
b.	OAC rule 3745-17-07(B)(1)	See b)(2)p. below.
c.	OAC rule 3745-17-08(B)	See b)(2)p. below.
d.	OAC rule 3745-31-05(A)(3) (PTI 15-01601 issued 07/20/06) See b)(2)b. below.	No visible particulate emissions except for one (1) minute during any 60-minute period for all paved roadways and parking areas.
e.	OAC rule 3745-31-05(A)(3) (PTI 15-01601 issued 07/20/06) See b)(2)c. below.	No visible particulate emissions except for three (3) minutes during any 60-minute period for all unpaved roadways and parking areas.

(2) Additional Terms and Conditions

a. This emissions unit consists of the facility roadways and parking areas and the operation of vehicles on the facility roadways and parking areas. These vehicles include trucks associated with: (1) waste hauling; (2) transporting of daily and intermediate cover materials; (3) transporting of sand and gravel; and

(4) earthmoving. The emissions associated with this emissions unit do not include the emissions from the combustion of fuels in the engines of the trucks.

b. The paved roadways and parking areas that are covered by this permit and subject to the above–mentioned requirements are listed below:

Paved roadways (for transporting materials obtained from off-site):

The section of Chapel Street S.E., which is west of State Route 44 and leads to the facility, and, the section of paved roadway, which extends from the end of Chapel Street, S.E., to the facility scales.

Paved parking areas:

Paved parking lots

c. The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

Unpaved roadways (for transporting materials obtained from off-site and on-site):

All unpaved roadways

Unpaved parking areas:

Unpaved parking lots

d. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water and vacuum-sweeping at sufficient treatment frequencies to ensure compliance and enforce a 25 mph posted speed limit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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

f. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to enforcing a 10 mph posted speed limit and committed to treating the unpaved roadways and parking areas with water spray and/or a dust suppressant at sufficient treatment frequencies to

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

g. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

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

i. 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.

j. Open-bodied vehicles transporting materials likely to become airborne as fugitive dust shall have such materials covered at all times after the vehicle reaches the scale house until the point of disposal if the control measure is necessary for the materials being transported.

k. The tires and bodies of all heavy-duty vehicles shall be washed with high pressure water prior to leaving the facility to minimize the carryover of dust or mud to public roadways. This washing shall not be required in freezing weather.

l. If dust or mud is carried onto the public roadways, it shall be removed, at the latest, by the end of the working day.

m. This facility shall not remove a paved roadway or parking area and replace it with an unpaved roadway or parking area.

n. 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.

o. The air contaminants emitted by this emissions unit shall not cause a public nuisance, in violation of Ohio Administrative Code (OAC) rule 3745-15-07.

p. There are no applicable emission limitations/control measures from OAC rules 3745-17-08(B) and 3745-17-07(B) because the facility is not located in an Appendix A area as specified in OAC rule 3745-17-08.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Paved roadways/parking areas	minimum inspection frequency
Paved roadways and parking areas	daily as defined in section b)(2)b.

Unpaved roadways/parking areas	minimum inspection frequency
Unpaved roadways and parking areas	daily as defined in section b)(2)c.

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

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic/operating 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 during the next inspection pursuant to the minimum inspection frequency.

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

(3) The permittee shall maintain records of information concerning inspections and control measures.

a. The permittee shall maintain daily records of the following information:

i. 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;

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

iii. The dates the control measures were implemented.

This information shall be kept separately for the paved roadways and parking areas and for the unpaved roadways and parking areas.

b. The permittee shall maintain quarterly records of 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. This record shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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

(4) The permittee shall maintain semi-annual records of (1) the distance in yards that a typical vehicle will travel on the permittee's paved roadways and parking areas in one round trip and (2) the distance in yards that a typical vehicle will travel on the permittee's unpaved roadways and parking areas in one round trip for purposes of calculating actual annual particulate emissions. The records shall be maintained individually for each of the four purposes that trucks serve when traveling on the permittee's roadways and parking areas. These four purposes are: waste hauling, transporting of daily and intermediate cover materials, transporting of sand and gravel, and transporting of earth. The distance records for the paved roadways and parking areas shall be recorded to the nearest 10 yards. The distance records for the unpaved roadways and parking areas shall be recorded to the nearest 150 yards.

[OAC rule 3745-31-05(A)(3) and 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 that 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.

(2) The deviation reports shall be submitted in accordance with the requirements specified in Part A– Standard Terms and Conditions.

(3) The permittee shall submit annual reports that include the annual PE emission rate. These reports shall be submitted by April 15 of each year. These reporting requirements may be satisfied by including and identifying the annual operating hours and specific emission data for this emissions unit in the annual Fee Emission Report.

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

f) Testing Requirements

(1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitations</u>:

No visible emissions except for one (1) minute during any 60-minute period for paved roadways and parking areas;

No visible emissions except for three (3) minutes during any 60-minute period for unpaved roadways and parking areas;

<u>Applicable Compliance Method</u>:

Compliance shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for

New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

No visible emission observations are specifically required to demonstrate compliance with the visible emission limitations, but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

b. Emission Limitations:

Fugitive PE from all paved and unpaved roadways and parking areas shall not exceed 834 tons per year (TPY).

Applicable Compliance Method:

In summary, the maximum controlled emission rate (834 tpy) for paved/unpaved roadways and parking areas was calculated using a worst case calculation based upon all landfill roads being used to support the 15,000 tons per day (TPD) waste acceptance rate (Allowable Maximum Daily Waste Receipt, AMDWR), using a mean vehicle weight based upon vehicles used for a particular purpose using landfill roads, and the assumed control efficiencies.

Compliance shall be demonstrated by calculation of the annual fugitive emissions from the plant roadways and parking areas, Total Annual Particulate Emissions (TAPE), using the actual annual Vehicle Miles Traveled (VMT) and comparing the calculated emissions with the emissions limitation.

Calculation of the uncontrolled PTAPE:

The uncontrolled total annual particulate emissions from the paved roadways and parking areas is the uncontrolled PTAPE. It shall be calculated using Equation 2 in Chapter 13.2.1 of AP-42, Compilation of Air Pollution Emissions Factors, Volume I: Stationary Point and Area Sources; Fifth Edition, (12/03) to obtain an uncontrolled emission factor with units of pounds of particulate emissions per vehicle mile traveled and multiplying this uncontrolled emission factor by the annual VMT on paved roadways and parking areas.

Eq. 1: E = k X (sl/2) exp 0.65 X (W/3) exp 1.5 X (1-P) / 4N

Where E = Uncontrolled emission factor in units of lbs of particulate emitted per VMT

k = Particle size multiplier which is equal to 0.082

sl = Road surface silt loading in grams per square meter

W = Average weight in tons of the vehicles traveling the road

P = Number of days in the year with at least 0.01 inches of precipitation

N = Number of days in the averaging period

The permittee has selected a value of 7.4 grams per meter for "sl" which is the average value for "sl" for a Municipal Solid Waste Landfill from 13.2. 1-4 of AP-42. If a value of "sl" becomes available which is more representative of the actual landfills soils, the permittee shall use the more representative value in the calculation. A separate value of "W" shall be calculated for each group of trucks which perform one of the four functions at the landfill (Section b)(2)a. The permittee shall calculate the value of "W" based on the best historical truck usage data available from this facility. The value of "P", which was selected is 140 days from Table 13.2.1-2 of the same section of AP-42. If a new version of Section 13.2.1 is published by USEPA with a new Table 13.2 1-2, the new value of "P" shall be used in the calculation. The value of "N" used is the number of days the facility will be open in the year.

The maximum annual VMT shall be calculated for each of the four values of "W" noted above the VMTW. For each value of "W", mileages shall be calculated utilizing the semi-annual records of the distance a typical truck will travel in one round trip from Section d)(4) above and the best available information for the actual number of trucks that traveled that distance and summed to obtain the maximum annual VMTW. The four values of the maximum annual VMTW shall be summed to obtain the maximum annual VMT for the paved roadways and parking areas.

<u>Calculation of the uncontrolled UTAPE:</u>

The uncontrolled total annual particulate emissions from the unpaved roadways and parking areas is the uncontrolled UTAPE. The uncontrolled UTAPE shall be calculated using Equation 2 in Chapter 13.2.2 of AP-42, Compilation of Air Pollution Emissions Factors, Volume I: Stationary Point and Area Sources; Fifth Edition, (12/03) to obtain an uncontrolled emission factor with units of pounds of particulate emissions per vehicle mile traveled and multiplying this uncontrolled emission factor by the annual VMT on unpaved roadways and parking areas.

Eq. 2: E = k X (s/12) exp 0.7 X (W/3) exp 0.45 X (1-P) / 4N

Where E = Uncontrolled emission factor in units of lbs of particulate emitted per VMT

k = Particle size multiplier which is equal to 4.9

s = Surface material silt content, percentage

W = Average weight in tons of the vehicles traveling the road

P = Number of days in the year with at least 0.01 inches of precipitation

N = Number of days in the averaging period

The permittee has selected a value of 6.4% for "s", which is the average value for "s" for a Municipal Solid Waste Landfill from Table 13.2.2 – 1 of AP-42. If a value of "s" becomes available which is more representative of the actual landfills soils, the permittee shall use the more representative value in the calculation. A separate value of "W" shall be calculated for each group of trucks which perform one of the four functions at the landfill (Section b)(2)a). The permittee shall

calculate the value of "W" based on the best historical truck usage data available from this facility. The value of "P" which was selected is 140 days from Figure 13.2.2 – 1 of the same section of AP-42. If a new version of Section 13.2.2 is published by USEPA with a new Figure 13.2.2 – 1, the new value of "P" shall be used in the calculation. The value of "N" used is the number of days the facility will be open in the year.

The maximum annual VMT shall be calculated for each of the four values of "W" noted above the VMTW. For each value of "W", mileages shall be calculated utilizing the semi-annual records of the distance a typical truck will travel in one round trip from Section d)(4) above and the best available information for the actual number of trucks that traveled that distance and summed to obtain the maximum annual VMTW. The four values of the maximum annual VMTW shall be summed to obtain the maximum annual VMT for the unpaved roadways and parking areas.

<u>Calculation of the total annual particulate emissions (TAPE):</u>

TAPE, in tons, is equal to the sum of the total annual particulate emissions from the paved roadways and parking areas (PTAPE) in tons plus the total annual particulate emissions from the unpaved roadways and parking areas (UTAPE) in tons.

TAPE = PTAPE + UTAPE

PTAPE = (uncontrolled PTAPE) X (1-fractional control efficiency)

UTAPE = (uncontrolled UTAPE) X (1-fractional control efficiency)

The fractional control efficiency of all the control methods used on the paved roadways and parking areas is assumed to be 0.85.

The fractional control efficiency of all the control measures used on the unpaved roadways and parking areas is assumed to be 0.85.

TAPE = 0.15 X (PTAPE + UTAPE)

If the calculated value of TAPE is less than or equal to 834 tons, compliance will be shown.

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

g) Miscellaneous Requirements

(1) None.

2. P902, MSW Landfill

Operations, Property and/or Equipment Description:

Land disposal of municipal solid waste (including asbestos) and destruction of NMOC in MSW landfill gas

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

(1) b)(1)h. and g)(1) through (2).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 15-01601 issued 07/20/06. This Title V Renewal incorporates the Chapter 31 modification of PTI 15-303 (F002) issued January 29, 1986, PTI 15-991 (F004) issued February 18, 1993 and PTI 15-1244 (P001 and P901) issued December 24, 1996; all of which are superseded upon issuance of this Administrative Modification that corrects the references in PTI 15-01601 for F001 and P902. See Section b)(2)a. for additional information.	Fugitive emissions of non-methane organic compounds (NMOC) shall not exceed 167.0 TPY. Fugitive emissions of methane (CH4) shall not exceed 26,057 TPY. Fugitive emissions of volatile organic compounds (VOC) shall not exceed 65.0 TPY. Fugitive emissions of hazardous air pollutants (HAPs) shall not exceed 23.71 TPY. Fugitive particulate emissions (PE) from the MSW landfill operations shall not exceed 1.64 tons per year. Visible fugitive PE from non-asbestos operations shall not exceed 10 percent opacity as a six-minute average. Best available control measures shall be used for non-asbestos operations that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)w. through b)(2)aa. below. The requirements established pursuant to

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.		this rule are equivalent to the requirements of OAC Chapter 3745-20; 40 CFR Part 61, Subparts A and M; 40 CFR Part 60, Subpart WWW; 40 CFR Part 63, Subpart AAAA and OAC Chapter 3745-19.
b.	OAC rule 3745-20, 40 CFR Part 61, NESHAP Subparts A and M	See b)(2)b. through b)(2)i. below.
c.	40 CFR Part 60, NSPS Subpart WWW 40 CFR Part 63, NESHAP Subpart AAAA	See b)(2)j. through b)(2)u. and c)(3) through (11).
d.	OAC rule 3745-17-07(B)(1)	See b)(2)v. below.
e.	OAC rule 3745-17-08(B)	See b)(2)v. below.
f.	OAC rule 3745-19	See c)(2) below.
g.	OAC rule 3745-31-05(A)(3) PTI 15-01601 issued 07/20/06. Control Device(s) Emissions This Title V Renewal incorporates the Chapter 31 Modification to PTI 15-1244 (P001) issued December 24, 1996; which is superseded upon the issuance of this Administrative Modification to PTI 15-01601. See Section c)(2)a. for additional information.	Emissions from the control devices(s) shall not exceed the following: 7.6 lbs of PM10/hour and 33.5 tons of PM10/year 53.7 lbs of CO/hour and 235.3 tons of CO/year 11.2 lbs of NOx/hour and 49.2 tons of NOx/year 7.2 lbs of SO2/hour and 31.4 tons of SO2/year 2.3 lbs of NMOC/hour and 10.1 tons of NMOC/year 0.9 lbs of VOC/hour and 4.0 tons of VOC/year 3.5 lbs of HCl/hour and 15.2 tons of HCl/year See Section c)(10) below.
h.	OAC rule 3745-31-05(A)(3) PTI 15-01601 issued 07/20/06.	Air Toxics Policy

(2) Additional Terms and Conditions

a. This Title V Renewal deleted emissions units Material Handling (F002), Storage Piles (F004) and MSW Landfill Flare #1 (P001) that were replaced by implementing applicable requirements for emissions unit MSW Landfill Operations (P902) in accordance with PTI 15-01601 and Solid Waste PTI 02-12954. The main modifications include:

i. Increase the design capacity of the landfill to approximately 124,000,000 cubic yards;

ii. Establish a particulate emissions (PE) annual allowable emissions limitation;

iii. Revise emissions limits associated with fugitive landfill gas emissions;

iv. Allow the facility to install control device(s) in the future as the landfill gas generation increases;

v. Limit the volume of landfill gas fed to the flare to 2,226 million scf per year and to incorporate the open flare emissions into the landfill emissions unit; and

vi. Landfill gas generated on the facility and captured and collected by the facility's landfill gas collection and control system is currently being routed to an on-site gas treatment system owned and operated by Toro Energy, LLC that processes the collected gas for subsequent use as pipeline quality gas. Therefore, the landfill gas flare functions as a back up control system which is only used when the off-site gas treatment system is not operating properly or if the off-site gas treatment system is taken off-line for maintenance.

[OAC rule 3745-77-07(A)(1) and PTI 15-01601]

b. There shall be no visible emissions from asbestos-containing materials (ACM) during on-site transportation, transfer, unloading, deposition or compacting operations.

[OAC rule 3745-77-07(A)(1), PTI 15-01601 and OAC rule 3745-20-06(B)(1)]

c. Deposition and burial operations shall be conducted in a careful manner that prevents asbestos-containing materials from being broken up or dispersed before the materials are buried.

[OAC rule 3745-77-07(A)(1), PTI 15-01601 and OAC rule 3745-20-06(B)(2)]

d. During the unloading, deposition, burial and initial compaction of asbestos-containing waste materials, the owner or operator of the active waste disposal site shall establish a restricted area adequate to deter the unauthorized entry of the general public and any unauthorized personnel from any location within one hundred feet of the operations.

[OAC rule 3745-77-07(A)(1), PTI 15-01601 and OAC rule 3745-20-06(B)(4)]

e. A hazard warning shall be displayed on signs not less than 20 x 14 inches in size, posted so they are visible before entering an area with asbestos waste disposal operations in progress; or, alternatively, mark vehicles used to transport asbestos-containing waste materials with 20 x 14 inch signs so that the signs are displayed in such a manner and location that a person can easily read the legend. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

Notation:

2.5 cm (1 inch) Sans Serif, Gothic or Block (lines # 1-2, above)
1.9 cm (inch) Sans Serif, Gothic or Block (line #3 above)
14 Point Gothic

Spacing between any two lines must be at least equal to the height of the upper two lines.

[OAC rule 3745-77-07(A)(1), PTI 15-01601 and OAC rule 3745-20-06(B)(5)]

f. The permittee shall cover and compact asbestos wastes in accordance with the following:

i. As soon as practical after the placement of friable 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 may be compacted.

ii. 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 condition i. above.

[OAC rule 3745-77-07(A)(1), PTI 15-01601 and OAC rule 3745-20-06(B)(3)]

g. The permittee shall implement and maintain an “Asbestos Disposal Operating Procedure and Spill Contingency Plan,” (“Plan”) consisting of: authorized personnel training, inspection and disposal operating procedures, non-conforming load response procedures, inventory and maintenance procedures for safety and emissions control equipment, record keeping procedures, and emergency notification procedures. Authorized personnel shall be knowledgeable in the procedures, and the Plan shall be available for inspection at this facility at all times.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

h. Emissions control equipment shall be available for wetting and containing asbestos in the event of a release or non-conforming load disposal. All equipment required to implement the Plan shall be maintained in accordance with good engineering practices to ensure that the equipment is in a ready-to-use condition and in an appropriate location for use.

[OAC rule 3745-77-05(A)(3) and PTI 15-01601]

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

[OAC rule 3745-20-06(E) and PTI 15-01601]

j. The requirements of 40 CFR, Part 63, Subpart AAAA also include compliance with the requirements of 40 CFR, Part 60, Subpart WWW.

k. The calculated NMOC emission rate for this facility is greater than 50 megagrams per year (Mg/yr); therefore, the permittee shall operate a collection and control system that captures the gas generated within the landfill as required below. The active collection system shall satisfy the following requirements.

i. The system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment.

ii. The system shall collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active, or 2 years or more if closed or at final grade.

iii. The system shall collect gas at a sufficient extraction rate.

iv. The system shall be designed to minimize off-site migration of subsurface gas.

[40 CFR 60.752(b)(2)(ii)(A)]

l. If the permittee seeks to demonstrate compliance with b)(2)k. through the use of a collection system not conforming to the specifications provided in b)(2)o. through b)(2)q., the permittee shall provide information satisfactory to the Canton City Health Department, Air Pollution Control Division to demonstrate that off-site migration is being controlled.

[40 CFR 60.752(b)(2)(i)(C)]

m. The design plan required in this section has been submitted to the Canton City Health Department, Air Pollution Control Division. The design plan included appropriate alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of Sections 60.753 through 60.758 proposed by the permittee. The collection and control system design plan conforms to specifications for active collection systems in 60.759 and is approved.

Many site-specific factors must be taken into consideration in landfill gas system design and alternative systems may be necessary. Therefore, the permittee must notify the Canton City Health Department, Air Pollution Control Division when an alternative design is determined to be necessary to meet the requirements of this section.

[40 CFR 60.752(b)(2)(i)(A, B and D)]

n. The permittee shall place each well or design component as specified in the approved design plan. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of 5 years or more if active; or 2 years or more if closed or at final grade.

[40 CFR 60.755(b)]

o. The permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Director:

i. The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

ii. The sufficient density of gas collection devices determined in b)(2)o.i. shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

[40 CFR 60.759(a)(1) and (2)]

p. The placement of gas collection devices shall control all gas producing areas, except as provided by i and ii below.

i. Any segregated area of non-degradable material may be excluded from collection if documented as provided under c)(14). The documentation shall provide the nature, date of deposition, location and amount of non-degradable material deposited in the area, and shall be provided to the Canton City Health Department, Air Pollution Control Division and Director upon request.

ii. Any non-productive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1% of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Canton City Health Department, Air Pollution Control Division and Director upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill.

Emissions from each section shall be computed using the following equation:

$$Qi = 2 \times k \times Lo \times Mi \times (e^{-kti} \times (C_{nmoc}) \times (3.6 \times 10^{-9})$$

Where:

Qi = NMOC emission rate from the i th section, in megagrams per year

k = methane generation rate constant, in year-1

Lo = methane generation potential, in cubic meters per megagram solid waste

Mi = mass of the degradable solid waste in the i th section, in megagrams

ti = age of the solid waste in the i th section, in years

C_{nmoc} = concentration of nonmethane organic compounds, in parts per million by volume

3.6×10^{-9} = conversion factor

iii. The values for k, Lo, and C_{nmoc} determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence. If field testing has not been performed, the default values for k, Lo and C_{nmoc} are provided below:

k* = 0.05 per year

Lo = 170 cubic meters per megagram

C_{nmoc} = 4,000 parts per million by volume as hexane

*For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorological site, the k value to be used is 0.02 per year.

[40 CFR 60.759(a)(3) i-iii]

q. When the permittee constructs new gas collection devices, the permittee shall use the following equipment or procedures:

i. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

ii. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

iii. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings, and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

[40 CFR 60.759(b)(1)-(3)]

r. The collection and control system may be capped or removed provided that all of the following conditions are met:

i. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Canton City Health Department, Air Pollution Control Division as provided in 40 CFR 60.757(d);

ii. The collection and control system shall have been in operation a minimum of 15 years; and

iii. Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year (55.1 TPY) on 3 successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

[40 CFR 60.752(b)(2)(v)]

s. If this emissions unit is permanently closed, a closure notification, as provided for in 40 CFR Part 60.757 (d), shall be submitted to the Canton City Health Department, Air Pollution Control Division.

[40 CFR 60.752(b)(2)(v)(A)]

t. The collected gas shall be routed to a control system that complies with one of the following options:

i. An open flare designed and operated as follows:

(a) The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes, during any 2 consecutive hours;

(b) The flare shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f); and

(c) The permittee shall comply with either the requirements in sections b)(2)t.i.(c).(i) and b)(2)t.i.(c).(ii) or the requirements in section b)(2)t.i.(c).(iii):

(i) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted, or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted shall be determined as follows or by utilizing methods approved by the Canton City Health Department, Air Pollution Control Division in accordance with 40 CFR Part 60, Subpart WWW:

Ht = k x (the summation of Ci Hi for i = 1 through i = n)

Where:

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

k = constant, 1.740 x 10 to the minus seven degree (1/ppm)(g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20 degrees C;

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

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

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

(1) steam-assisted and non-assisted flare shall be designed for and operated with an exit velocity of equal to or greater than 18.3 m/sec. (60 ft/sec), but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of

the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf); and

(2) steam-assisted and non-assisted flare shall be designed for and operated with an exit velocity of less than the velocity, Vmax, and less than 122 m/sec (400 ft/sec) are allowed, as determined by Log10 (Vmax) = Ht + 28.80/31.7.

Where:

Vmax = maximum permitted velocity, M/sec;

28.8 = constant;

31.7 = constant; and

Ht = the net heating value as determined in Section B)(2)t.i.(c).(i). above.

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

Vmax = (Xh2-K1)* K2

Where

Vmax = maximum permitted velocity, m/sec;

K1 = constant, 6.0 volume-percent hydrogen;

K2 = constant, 3.9 (m/sec)/volume-percent hydrogen; and

Xh2 = the volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77, or utilizing methods approved by the Canton City Health Department, Air Pollution Control Division in accordance with 40 CFR Part 60, Subpart WWW.

(iv) Air-assisted flare shall be designed for and operated with an exit velocity of less than the velocity, Vmax, as determined by the following equation:

Vmax = 8.706 + 0.7084 (Ht)

Where:

Vmax = maximum permitted velocity, m/sec;

8.706 = constant;

0.7084 = constant; and

Ht = the net heating value as determined in section b)(2)t.i.(c).(i). above.

ii. A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 60.754(d) (See Section f) below).

(a) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(b) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756;

iii. 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 60.752 (b)(2)(iii)(A) or (B).

[40 CFR 60.752(b)(2)(iii)]

u. The emission limitations for the control device(s) has (have) been established based upon the landfill's potential to emit as predicted by USEPA's Landfill Gas Estimation program (LANDGEM), AP-42 emission factors, and standard industry assumptions. These maximum emissions are expected to occur after the year 2016 if the facility were to accept its authorized maximum daily waste each day. The facility is currently sending all landfill gas off-site to a treatment facility which processes the landfill gas and prepares it for subsequent sale. Alternate control device(s) is (are) being permitted as a back-up control method in the event that the off-site processing plant is inoperable. Based upon the above, the facility has committed to the following:

i. The facility shall install additional control device(s), as necessary, to maintain compliance with the requirements in 40 CFR 60.752(b)(2)(iii) and the emission limitations contained in Part C, 2.b)(1)g. This will be accomplished by selecting and installing new replacement and/or additional control device(s) when the capacity of the current control method(s)/device(s) will no longer control the volume of gas emitted by the landfill.

ii. The selected control device(s) must be capable of demonstrating compliance based upon the calculations contained in Part C.2.f. of this permit.

[40 CFR 60.752(b)(2)(iii) and PTI 15-01601]

v. There are no applicable emission limitations/control measures from OAC rules 3745-17-08(B) and 3745-17-07(B) because the facility is not located in an Appendix A area as specified in OAC rule 3745-17-08.

w. The permittee shall ensure that solid wastes are deposited, spread, and compacted in such a manner as to minimize or prevent visible emissions of dust. All truckloads of solid waste shall be unloaded in a manner which will minimize the drop height of the solid wastes. Any dusty construction materials, soils or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in order to minimize or eliminate visible emissions of fugitive dust. Watering shall be conducted in such a manner as to avoid the pooling of liquids and runoff. No dusty material shall be dumped during periods of high wind speed, unless the material has been treated to prevent fugitive dust emissions from becoming airborne.

[PTI 15-01601]

x. The non-asbestos material handling activities that are covered by this permit and subject to the above-mentioned annual fugitive mass PE limitation and the visible fugitive PE limitation for non-asbestos operations are listed below:

Waste handling (depositing, spreading, and compacting)

Landfill daily and intermediate cover handling

Wind erosion from landfill surfaces

General earthmoving and soil handling during landfill construction

Landfill aggregate handling during landfill construction.

i. The asbestos-containing material handling activities that are covered by this permit and subject to the above-mentioned visible fugitive PE limitation for asbestos-containing materials operations are listed below:

on-site transportation, transfer, unloading, deposition, and compacting operations of asestos-containing materials.

[PTI 15-01601]

y. The permittee shall employ best available control measures on all activities listed in 2.x. for the purpose of ensuring compliance with the above-mentioned applicable requirements (particulate emission limitations). In accordance with the permittee's permit application, the permittee has committed to covering the active storage piles or spraying them with water or a surfactant solution as necessary to control fugitive dust. Also in accordance with the permittee's permit application, the permittee has committed to covering the inactive storage piles with vegetation or another type of cover or spraying them with water or a surfactant solution as necessary to control fugitive dust. Nothing in

this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

z. 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 if there is snow and/or ice cover or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements (particulate emission limitations). Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its us.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

aa. 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.

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

ii. The permittee shall employ control measures, including the application of best available technology (BAT), for the purpose of ensuring compliance with OAC rule 3745-15-07.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

c) Operational Restrictions

(1) The permittee shall be limited to accepting for disposal no more than 4,605,000 tons of waste material per calendar year.

[OAC rule 3745-31-05(A)(3)] and PTI 15-01601]

(2) There shall be no open burning in violation of OAC rule 3745-19 at this facility.

[OAC rule 3745-31-05(A)(3)] and PTI 15-01601]

(3) The permittee shall operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for 5 years or more if active, or for 2 years or more if closed or at final grade, and as required in 40 CFR 60.752, 60.753, and this permit. The collection and control system shall meet the specifications for an active collection system as required in 40 CFR 60.759, included in this permit.

[40 CFR 60.753(a) and PTI 15-01601]

(4) The permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:

a. a fire or increased well temperature. [The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports e)(7)f. as provided in 40 CFR 60.757(f)(1)];

b. use of a geo-membrane or synthetic cover. [The permittee shall develop acceptable pressure limits in the design plan]; or

c. a decommissioned well. [A well may experience a static positive pressure after the shutdown to accommodate for declining flows. All design changes shall be approved by Ohio EPA and the Canton City Health Department, Air Pollution Control Division.]

[40 CFR 60.753(b)]

(5) The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

a. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 60.752(b)(2)(i).

b. Unless an alternative test method is established as allowed by 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A except that: The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

i. A data recorder is not required;

ii. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

iii. A calibration error check is not required; and

iv. The allowable sample bias, zero drift, and calibration drift are plus or minus (±) 10 percent.

[40 CFR 60.753(c)]

(6) The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific

deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

The permittee shall install a new well or other collection device for any location where the monitored methane concentration equals or exceeds 500 ppm above background three times within a quarterly period and within 120 calendar days of the initial exceedance. (An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.)

[40 CFR 60.753(d)] and [40 CFR 60.755(c)(4)(v)]

(7) The permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii) unless the collected gas is routed to a treatment system that processes the collected gas for subsequent sale. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

[40 CFR 60.753(e)]

(8) The permittee shall operate the control and/or treatment system at all times when the collected gas is routed to the system.

[40 CFR 60.753(f)]

(9) If monitoring demonstrates that the operational requirements for negative pressure, interior wellhead temperature, wellhead oxygen or nitrogen concentration, and/or surface methane levels are not met, corrective action shall be taken as specified in the monitoring and record keeping requirements for the pressure, temperature, oxygen or nitrogen concentration at each well's gas collection header and surface methane measurements. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements.

[40 CFR 60.753(g)]

(10) The facility's current open flare shall be limited to inputting less than or equal to 2,226 million scf of landfill gas per year. The permittee shall demonstrate compliance upon PTI issuance by using past records of monthly landfill gas input rates. Upon replacement of the current open flare, the permittee shall comply with condition A.I.2.u. above.

[OAC rule 3745-31-05(A)(3)]

(11) The provisions of Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment of control devices, in which case any deviation from the requirements shall be recorded and included in the semiannual report.

[40 CFR 60.755(e)]

(12) The permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.

[40 CFR 63.1960 and 40 CFR 63.6]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall inspect each load of asbestos-containing material delivered to the facility. The inspection shall consist of a visual examination to ensure that each shipment of asbestos-containing materials is received in intact, leak-tight containers labeled with appropriate hazard warning labels, the name of the waste generator, and the location of waste generation. The inspection also shall determine whether the waste shipment records accompany the consignment and accurately describe the waste material and quantity.

[OAC rule 3745-31-05(A)(3)]

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

a. The waste shipment record form for each shipment of asbestos-containing materials; and

b. The location, depth and area, and quantity in cubic yards of all asbestos-containing materials within the disposal site, on a map or a diagram of the disposal area.

[OAC rule 3745-20-06(C)]

(3) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up to date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[40 CFR 70.758(a)]

(4) Except as provided in 40 CFR 60.752(b)(2)(i), each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead, and:

a. Measure the gauge pressure in the gas collection header (at each wellhead) on a monthly basis as provided in 40 CFR 60.755(a)(3).

b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and

c. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).

[40 CFR 60.756(a)]

(5) Each owner or operator seeking to comply with 60.752(b)(2)(iii) using an enclosed combustor shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

a. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of 1 percent of the temperature being measured expressed in degrees Celsius or 0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

b. A device that records flow to or bypass of the flare. The owner or operator shall either:

i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

ii. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[40 CFR 60.756(b)]

(6) Each owner or operator seeking to comply with 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

b. A device that records flow to or bypass of the flare. The owner or operator shall either:

i. install, calibrate, and maintain a gas flow rate measuring device at least every 15 minutes; or

ii. secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[40 CFR 60.756(c)]

(7) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected

during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[40 CFR 60.756(f)]

(8) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment, of the data listed in 8.a. below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

a. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):

i. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1) (See section 2.f). The owner or operator may use another method to determine the maximum gas generation flow rate if the method has been approved by the Canton City Health Department, Air Pollution Control Division.

ii. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).

b. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[40 CFR 60.758(b)(1) and (b)(4)]

(9) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

a. The following constitute exceedances that shall be recorded and reported under 60.757(f):

i. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 degrees C below the average combustion temperature during the most recent performance test at which compliance with 60.752(b)(2)(iii) was determined.

ii. For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph 40 CFR 60.758(b)(3).

b. Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.

c. Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

d. Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[40 CFR 60.758(c)(1) through(c)(4)]

(10) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

a. Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

b. Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

[40 CFR 60.758(d)]

(11) Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

[40 CFR 60.758(e)]

(12) This facility shall maintain monthly records of the amount of landfill gas, in scf, produced by the landfill, the amount of landfill gas, in scf, input to the open flare(s) and/or the enclosed combust(or(s), the number of hours that the open flare(s) and/or enclosed combustor(s) was (were) operated and the amount of landfill gas, in scf, input to the treatment system that processes the gas for subsequent sale or use.

(13) The permittee shall perform daily inspections to observe the following non-asbestos material handling activities when the activity(ies) is (are) being conducted:

a. Waste handling (depositing, spreading and compacting)

Landfill daily and intermediate cover handling

Wind erosion from landfill surfaces

General earthmoving and soil handling during landfill construction

Landfill aggregate handling during landfill construction

b. For the material handling activities (on-site transportation, transfer, unloading, deposition, and compacting operations) of asbestos-containing materials, the permittee shall perform daily inspections to observe the activities when the activities are being conducted.

c. The inspections shall be documented and recorded as required in condition c)(14) below.

[OAC rule 3745-31-05(A)(3), PTI 15-01601 and 40 CFR 60.756(c)]

(14) No inspection shall be necessary when the non-asbestos material handling activity(ies) is (are) not being conducted when there is snow and/or ice cover, and/or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned visible fugitive PE limitation. Any required inspection that is not performed due to any of the above-identified events shall be performed during the next inspection pursuant to the minimum inspection frequency.

a. The purpose of the non-asbestos material handling activity(ies) inspections is to determine the need for implementing the control measures specified in this permit to minimize and eliminate visible emissions of fugitive dust from the activities. The inspections shall be performed during representative, normal landfill operating conditions.

b. The purpose of the asbestos-containing material handling activity(ies) inspections is to determine the need for implementing the control measures specified in this permit to eliminate visible emissions of fugitive dust from the activities. The inspections shall be performed during representative, normal landfill operating conditions.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(15) The permittee shall maintain a daily operations log which lists all of the above landfill activities. (Note that if the records required in this Term and Condition exactly duplicate any records required under the facility's Division of Solid and Infectious Waste

Management (DSIWM) permit, the DSIWM record will suffice to meet this Term and Condition). The daily operations log shall clearly indicate/contain the following:

a. The date and whether an inspection was performed and, if not performed, the reason why the inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. The activities which were in operation;

c. Each activity where it was determined by the person conducting the inspection that it was necessary to implement the control measures to meet the above-mentioned visible fugitive PE limitation;

d. Whether control measures were employed to minimize or eliminate visible emissions of fugitive dust; and

e. With regards to the waste handling activities, the amount, in tons, of waste material accepted for disposal.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(16) The permittee shall maintain an annual cumulative (calendar year) record to be updated quarterly:

a. of days inspections were not performed by the required frequency, and

b. of days in which control measures were determined to be necessary by an inspector, but were not implemented.

[PTI 15-01601]

e) Reporting Requirements

(1) The permittee shall submit quarterly reports summarizing the asbestos disposal activities. The reports shall contain the following information:

a. The name, address and location of the facility, the calendar period covered by the report, and any changes in the methods of storage or the disposal operations;

b. A list of all asbestos-containing waste consignments received including: the date received, the name of the waste generator, the name and location of the facility where the load originated, the quantity of asbestos, and any discrepancy or non-conformity discovered; and

c. These quarterly reports shall be submitted to the Canton City Health Department, Air Pollution Control Division no later than January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(2) As soon as possible and no longer than 30 days after receipt of the asbestos waste, the permittee shall send a copy of the signed waste shipment record to the waste generator.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(3) Upon discovery of a discrepancy between the quantity of asbestos waste designated on a waste shipment record and the quantity actually received, the permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the State, local, district, or USEPA regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Canton City Health Department, Air Pollution Control Division. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(4) The permittee shall submit, upon closure of the facility, a copy of the records of the asbestos waste disposal locations and quantities.

[40 CFR 61 Subpart M and PTI 15-01601]

(5) The permittee shall notify the Canton City Health Department, Air Pollution Control Division, in writing, at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice:

a. Scheduled starting and completion dates;

b. Reason for disturbing the waste;

c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material (if deemed necessary, the Director may require changes in the proposed emission control procedures;) and

d. Location of any temporary storage site and the final disposal site.

[OAC rule 3745-20-07(D) and PTI 15-01601]

(6) The permittee shall notify the Canton City Health Department, Air Pollution Control Division of any load of asbestos-containing material which is rejected, or any non-conforming load disposed of in accordance with the “Asbestos Spill Contingency Plan.” Notification shall be provided as soon as possible by a phone contact, followed in writing by the next working day. The written notification shall provide a copy of the waste shipment record (“WSR”), if available, or when waste is not shipped with a WSR, provide available information concerning vehicle identification, source of the load, a description of the load, nature of discrepancy, and the location of disposal. If possible, non-conforming loads of suspect friable material shall be detained, or the location of disposal protected from damage, until the Canton City Health Department, Air Pollution Control Division is informed and provided the opportunity to inspect.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(7) The permittee shall submit an annual report by April 15th of each year, covering the previous calendar year, of the amount in tons of waste material accepted for disposal in that calendar year.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(8) Reporting Requirements for Landfill Gas Operations

a. The permittee shall submit any and all reports in accordance with the Standards of Performance for Municipal Solid Waste Landfills, 40 CFR 60.757, except as indicated in this and the following term and condition.

The reports shall be submitted to the:

Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, OH 44702-1544.

b. Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Canton City Health Department, Air Pollution Control Division ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996. The initial design capacity report shall contain the following information:

i. A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.

ii. The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with such parameters as part of the report. The State, Tribal, local agency or Canton City Health Department, Air Pollution Control Division may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

[40 CFR 60.757(a) and PTI 15-01601]

c. This facility has fulfilled the requirement to submit the initial collection and control system design plan. Therefore, the permittee is not subject to submitting the collection and control system design plan in 40 CFR 60.752(b)(2)(i) and in 40 CFR 60.757(c) except that this facility shall submit a report certifying that the collection and control system either conforms with the specifications for active collection systems in 40 CFR 60.759 or include a demonstration to the Canton

City Health Department, Air Pollution Control Division's satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.759.

[40 CFR 60.757(c) and PTI 15-01601]

d. Each owner or operator of a controlled landfill shall submit a closure report to the Canton City Health Department, Air Pollution Control Division within 30 days of waste acceptance cessation. The Canton City Health Department, Air Pollution Control Division may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Canton City Health Department, Air Pollution Control Division, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[40 CFR 60.757(d) and PTI 15-01601]

e. Each owner or operator of a controlled landfill shall submit an equipment removal report to the Canton City Health Department, Air Pollution Control Division 30 days prior to removal or cessation of operation of the control equipment.

i. The equipment removal report shall contain all of the following items:

(a) A copy of the closure report submitted in accordance with 40 CFR 60.757(d);

(b) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(c) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

ii. The Canton City Health Department, Air Pollution Control Division may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

[40 CFR 60.757(e) and PTI 15-01601]

f. By January 31st and July 31st of each year, each owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to the Canton City Health Department, Air Pollution Control Division semi-annual reports, in accordance with Part A Standard Terms and Conditions, of the recorded information in sections i. through vi. below. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).

i. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c) and (d);

ii. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756;

iii. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating;

iv. All periods when the collection system was not operating in excess of 5 days;

v. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month; and

vi. The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3) and (5), and (c)(4) of 40 CFR 60.755.

[40 CFR 60.757 (f) and PTI 15-01601]

g. The permittee shall submit the following information with the initial performance test report required pursuant to 40 CFR 60.8, if not already completed:

i. a diagram of the collection system showing collection system positioning, including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

ii. the data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

iii. the documentation of the presence of asbestos or non-degradable material for each area from which collection wells have been excluded based on the presence of asbestos or non-degradable material;

iv. the sum of the gas generation flow rate for all areas from which collection wells have been excluded based on non-productivity and the calculations of gas generation flow rate for each excluded area;

v. the provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

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

(9) By April 15th of each year, the permittee shall submit an annual report covering the previous calendar year detailing the amount of landfill gas, in scf, produced by the

landfill, amount of landfill gas, in scf, input to the open flare(s) and/or the enclosed combustor(s), the number of hours that the open flare(s) and/or the enclosed combustor(s) was (were) operated and the amount of landfill gas, in scf, input to the treatment system that processes the gas for subsequent sale or use. These reporting requirements may be satisfied by including and identifying this information in the annual Fee Emissions Report.

[OAC rule 3745-31-05(A)(3) and PTI 15-01601]

(10) By January 31 of each year, the permittee shall submit an annual report that identifies any of the following occurrences relating to inspections of landfill activities during the previous year:

a. Each day during which an inspection was not performed by the required frequency; and

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

[OAC 47l3 3745-31-05(A)(3) and PTI 15-01601]

f) Testing Requirements

(1) Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods in paragraphs (1)a. through (1)f. of this section shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752 (b)(2)(ii).

a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Director and Canton City Health Department, Air Pollution Control Division. If k has been determined as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

i. For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2\ Lo \times R \times [(e^{-kc}) - (e^{-kt})]$$

Where:

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

Lo = methane generation potential, cubic meters per megagram solid waste;

R = average annual acceptance rate, megagram per year;

k = methane generation rate constant, year -1;

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less (If the equipment is installed after closure, t is the age of the landfill at installation), years; and

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

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

QM = the summation of 2 x k x Lo x Mi x (e^{-kt} x i) for i = 1 through i = n

Where:

QM = maximum expected gas generation flow rate, cubic meters per year;
k = methane generation rate constant, year-1;

Lo = methane generation potential, cubic meters per megagram solid waste;
Mi = mass of solid waste in the i th section, megagrams; and

ti = age of the i th section, years.

iii. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs f)(1)a.i and f)(1)a.ii. of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs f)(1)a.i. or f)(1)a.ii. or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

[40 CFR 60.755(a)(1)]

b. For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Director and Canton City Health Department, Air Pollution Control Division, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

[40 CFR 60.755 (a)(2)]

c. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved

without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director and Canton City Health Department, Air Pollution Control Division for approval.

[40 CFR 60.755(a)(3)]

d. Owners or operators are not required to expand the system as required in paragraph f)(1)c. of this section during the first 180 days after gas collection system startup.

[40 CFR 60.755(a)(4)]

e. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director and Canton City Health Department, Air Pollution Control Division for approval.

[40 CFR 60.755(a)(5)]

f. An owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to the Director and Canton City Health Department, Air Pollution Control Division as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

[40 CFR 60.755(a)(6)]

(2) The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d).

a. After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (3) of this section.

b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

c. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs d.i. through d.v. of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).

i. The location of each monitored exceedance shall be marked and the location recorded.

ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph d.v. of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph d.v. has been taken.

iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph d.ii. or d.iii. of this section shall be re-monitored 1 month from the initial exceedance, If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph d.iii. or d.v. shall be taken.

v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Director and Canton City Health Department, Air Pollution Control Division for approval.

e. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[40 CFR 60.755(c) and (d)]

(3) Each owner or operator seeking to comply with the provisions in f)(2) shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

a. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of Appendix A, except that "methane" shall replace all references to VOC.

b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of Appendix A, the instrument evaluation procedures of section 4.4 of Method 21 of Appendix A shall be used.

d. The calibration procedures provided in section 4.2 of Method 21 of Appendix A shall be followed immediately before commencing a surface monitoring survey.

[40 CFR 60.755(d)]

(4) Fugitive landfill emissions resulting from the biological breakdown of organic wastes shall not exceed the values shown in Section C.2.b)(1) which are based on calculations described below. These calculations represent the highest emission rates which could occur based on landfill gas emission rates predicted by a maximum annual rate of waste material accepted for disposal of 4,605,000 tons, USEPA's Landfill Gas Estimation program (LANDGEM), AP-42 and other emission factors, a capture efficiency of 75% (the AP-42 default value) for the gas collection and control system, an assumption that 25% of the wastes disposed are inert and are not broken down to create landfill gas, and other assumptions contained in the application.

a. The resulting emissions were predicted:

<u>Emissions Limitation</u>:

Fugitive emissions of non-methane organic compounds (NMOC) shall not exceed 167 TPY.

<u>Applicable Compliance Method</u>:

NMOC: Emissions were predicted by USEPA's LANDGEM model

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

Fugitive emissions of methane (CH4) shall not exceed 26,057 TPY.

<u>Applicable Compliance Method</u>:

CH4: Emissions were predicted by USEPA's LANDGEM model and AP-42, Section 2.4.

c. Emissions Limitation:

Fugitive emissions of volatile organic compounds (VOC) shall not exceed 65.0 TPY.

Applicable Compliance Method:

VOC: Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations.

d. Emissions Limitation:

Fugitive emissions of hazardous air pollutants (HAPs) shall not exceed 23.71 TPY.

Applicable Compliance Method:

HAP: Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations.

(5) Emissions Limitation:

Particulate emissions (PE) from the MSW landfill operations shall not exceed 1.64 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by employing the emission factors derived from the equations in AP-42, Compilation of Air Pollution Emission Factors, Chapter 13.2.4 (January, 1995) for all material handling and storage piles.

Maximum potential uncontrolled emission rates for material handling and storage piles were calculated by using worst case calculations contained in the application based upon material handling being performed to support 15,000 tons per day (TPD) waste acceptance rate (Allowable Maximum Daily Waste Receipt).

(6) Emissions Limitation:

Visible fugitive particulate emissions from non-asbestos operations shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method:

Compliance with the visible emission limitation identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

No visible emission observations are specifically required to demonstrate compliance with the visible emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(7) Emissions Limitation:

There shall be no visible emissions from asbestos-containing materials during on-site transportation, transfer, unloading, deposition or compacting operations of asbestos-containing materials.

Applicable Compliance Method:

Compliance with the no visible emissions requirement specified in section C.2.b)(1) shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

No visible emission observations are specifically required to demonstrate compliance with the visible emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(8) The following emission limitations are applicable to landfill gas control device(s).

a. Emissions Limitation:

7.6 lbs of particulate matter emissions equal to or less than an aerodynamic diameter of nominally 10 microns (PM10) per hour and 33.5 tons of PM10/year.

Applicable Compliance Method:

Initial compliance with the above hourly emission limitation may be determined by multiplying the (maximum landfill gas generation rate of 13,138 dscfm) x (0.50 cubic ft. methane/cubic ft. of landfill gas) x (17 lbs of PM/1,000,000 dscf methane*) x (60 minutes/hour) = 7.6 lbs/hr.

*AP-42, Section 2.4, Municipal Solid Waste Landfills [11/98] (all PM is assumed to be PM_{10})

Compliance with the hourly emission limitation shall be determined by multiplying the (maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in dscfm) x (0.50 cubic ft. methane/cubic ft. of landfill gas) x (17 lbs of PM/1,000,000 dscf methane*) x (60 minutes/hour) = result in lb/hr.

The permittee shall demonstrate compliance with the hourly emission limitation in accordance with the methods and procedures specified in Methods 1-5 of 40 CFR Part 60, Appendix A.

No Method 1-5 testing is specifically required to demonstrate compliance with the hourly emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

b. Emissions Limitation:

53.7 lbs. of Carbon Monoxide (CO) per hour and 235.3 tons of CO/year.

Applicable Compliance Method:

Initial compliance with the above hourly emission limitation has been determined by multiplying the maximum landfill gas generation rate of 14,280 scfm, 0.50 cubic ft. methane/cubit ft. of landfill gas, 1000 BTU/cubic ft. of methane, 0.125 lb of CO/1,000,000 BTU*, and 60 minutes/hour = 53.7 lbs/hr.

*This value has been established based upon a manufacturer's performance guarantee.

Compliance with the hourly emission limitation shall be determined by multiplying the (maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in scfm) x methane) x (emissions factor of control equipment or the most recent value determined by stack testing in lbs of CO/1,000,000 BTU) x (60 minutes/hour) = result in lb/hr.

The permittee shall demonstrate compliance with the hourly emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 10 tests are specifically required to demonstrate compliance with the hourly emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

c. Emissions Limitation:

11.2 lbs of Oxides of Nitrogen (NOx) per hour and 49.2 tons of NOx/year.

Applicable Compliance Method:

Initial compliance with the above hourly emission limitation has been determined by multiplying the maximum landfill gas generation rate of 14,280 scfm, 0.50 cubic ft. methane/cubic ft. of landfill gas, 1,000 BTU/cubic ft. of methane, 0.040 lb of NOx/1,000,000 BTU*, and 60 minutes/hr = 11.2 lbs/hr.

*This value has been established based upon a manufacturer's performance guarantee.

Compliance with the hourly emission limitation shall be determined by multiplying the (maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in scfm) x (0.50 cubic ft. methane/cubic ft. of landfill gas) x (1,000 BTU/cubic ft. of methane) x (emissions factor of control equipment or the most recent value determined by stack testing in lbs of NOx/1,000,000 BTU) x (60 minutes/hr) = 17.1 lbs/hr.

The permittee shall demonstrate compliance with the hourly emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 7 tests are specifically required to demonstrate compliance with the hourly emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emissions limitation was established by multiplying the hourly emissions limitation by 8,760 hr/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

d. Emissions Limitation:

7.2 lbs. of Sulfur Dioxide (SO2) per hour and 31.4 tons of SO2/yr.

Applicable Compliance Method:

Initial compliance with the above hourly emission limitation shall be determined by using AP-42, Municipal Solid Waste Landfills [11/98] and the following equation:

((the maximum landfill gas generation rate of 14,280 scfm) x (49.6 *ppmv/1,000,000 MMscf/scf) x (64.066 molecular weight of SO_2))/(0.7302 universal gas constant* '520 Temp) x 60 min/hr = 7.2 lbs/hr.

*Sulfur concentration in the exhaust gas from AP-42 = 49.6 ppmv based upon 99.7% landfill gas control efficiency (represents worst-case emissions for SO2).

Compliance with the hourly emissions limitation shall be determined by the following equation:

((maximum volume of landfill gas combusted by the control devices(s) as demonstrated by recordkeeping, in scfm) x (49.6 *ppmv/1000000 MMscf/scf) x (64.066 molecular weight of SO_2))/(0.7302 universal gas constant* '520 Temp) x 60 min/hr = result.

The permittee shall demonstrate compliance with the hourly emission limitation in accordance with the methods and procedures specified in Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 6 tests are specifically required to demonstrate compliance with the hourly emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emissions limitation was established by multiplying the hourly emissions limitation by 8,760 hr/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

e. Emissions Limitation:

2.3 lbs of NMOC/hr and 10.1 tons of NMOC/yr.

Applicable Compliance Method:

Initial compliance with the above hourly emissions limitation may be determined by using AP-42, Municipal Solid Waste Landfills [11/98] and the following equation:

((the maximum landfill gas generation rate of 14,280 scfm) x (595 *ppmv/1,000,000 MMscf/scf) x (86.18 molecular weight of NMOC [as hexane]))/(0.7302 universal gas constant x '520 Temp)) x (60 min/hr) x (1-0.98 control efficiency of the control device(s)) = 2.31 lbs/hr.

Compliance with the hourly emissions limitation shall be determined by the following equation:

((the maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in scfm) x (595 *ppmv/1000000

MMscf/scf) x (86.18 molecular weight of NMOC [as hexane]))/ (0.7302 universal gas constant x '520 Temp)) x (60 min/hr) x (1-0.98 control efficiency of the control device(s)) = result in lb/hr.

*Default NMOC concentration in inlet gas from AP-42 = 595 ppmv.

The permittee shall demonstrate compliance with this emissions limitation in accordance with the methods and procedures specified in Methods 1-4 and 18 of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 18 tests are specifically required to demonstrate compliance with the hourly emissions limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emissions limitation was established by multiplying the hourly emissions limitation by 8,760 hr/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

f. Emissions Limitation:

0.9 lb of VOC/hr and 4.0 tons of VOC/yr.

Applicable Compliance Method:

Initial compliance with the above hourly emissions limitation may be determined by using AP-42, Municipal Solid Waste Landfills [11/98] and the following equation:

((the maximum landfill gas generation rate of 14,280 scfm) x (595 *ppmv/1,000,000 MMscf/scf x .39 percentage of VOC in landfill gas from AP-42) x (86.18 molecular weight of NMOC [as hexane]))/(0.7302 universal gas constant x ‘520 Temp)) x (60 min/hr) x (1-0.98 control efficiency of the control device(s)) = 0.9 lb/hr.

Compliance with the hourly emissions limitation shall be determined by the following equation:

((the maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in scfm) x (595 *ppmv/1,000,000 MMscf/scf x .39 percentage of VOC in landfill gas from AP-42) x (86.18 molecular weight of NMOC [as hexane]))/ (0.7302 universal gas constant x ‘520 Temp)) x (60 min/hr) x (1-0.98 control efficiency of the control device(s)) = result in lb/hr.

*Default NMOC concentration in inlet gas from AP-42 = 595 ppmv.

The permittee shall demonstrate compliance with this emissions limitation in accordance with the methods and procedures specified in Methods 1-4 and 18 of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 18 tests are specifically required to demonstrate compliance with the hourly emissions limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emissions limitation was established by multiplying the hourly emissions limitation by 8,760 hrs/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

g. Emissions Limitation:

3.5 lbs of Hydrogen Chloride (HCl) per hour and 15.2 tons of HCl/yr.

Applicable Compliance Method:

Initial compliance with the above hourly emissions limitation shall be determined by using AP-42, Municipal Solid Waste Landfills [11/98] and the following equation:

((the maximum landfill gas generation rate of 14,280 scfm) x (42.0 *ppmv/1,000,000 MMscf/scf)) x (36.5 molecular weight of HCl))/(0.7302 universal gas constant* '520 Temp) x 60 min/hr = 3.5 lbs/hr.

*Sulfur concentration in the exhaust gas from AP-42 = 42.0 ppmv based upon 99.7% landfill gas control efficiency (represents worst-case emissions for HCl).

Compliance with the hourly emissions limitation shall be determined by the following equation:

((maximum volume of landfill gas combusted by the control device(s) as demonstrated by recordkeeping, in scfm) x (42.0 *ppmv/1,000,000 MMscf/scf) x (36.5 molecular weight of HCl))/(0.7302 universal gas constant* '520 Temp) x 60 min/hr = result in lb/hr.

*HCl concentration in the exhaust gas from AP-42 = 42.0 ppmv based upon 99.7% landfill gas control efficiency (represents worst-case emissions for HCl).

The permittee shall demonstrate compliance with this emissions limitation in accordance with the methods and procedures specified in Methods 1-4 and 265 or 26A of 40 CFR Part 60, Appendix A.

No Method 1-4 and Method 265 or Method 26A tests are specifically required to demonstrate compliance with the hourly emissions limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

The initial annual emissions limitation was established by multiplying the hourly emissions limitation by 8,760 hr/yr. and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation will be satisfied.

The actual annual emissions shall be calculated by multiplying the calculated hourly emission rate by the hours of operation per year and dividing by 2,000 lbs/ton.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

h. Emissions Limitation:

No visible 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 shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22, and procedures specified in 40 CFR Part 60.18.

No Method 22 tests are specifically required to demonstrate compliance with the visible emissions limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)].

(9) The initial performance testing has been conducted to demonstrate that the current control device can operate in conformance with the requirements specified in 40 CFR Part 60.18.

However, if subsequently required or if the permittee installs an additional open flare(s) and/or an enclosed combustor(s) to control the additional predicted landfill gas volume, the permittee shall conduct or have conducted, additional performance test(s) to demonstrate that the flare(s) and/or enclosed combustor(s) can operate in conformance with the requirements specified below:

a. The testing for any new control equipment installation shall be conducted within 180 days of start up.

b. The total emissions from all control equipment shall comply with the limits contained in C.2.b)(1).

c. For an open flare, a performance test shall be conducted to demonstrate compliance with the requirements specified in 40 CFR 60.18. The net heating value of the gas being combusted in the flare and the actual exit velocity of the flare shall be determined in accordance with the procedures and methods specified in 40 CFR Part 60.18. The visible emission evaluations shall be conducted in accordance with the procedures specified in section c.2.f)(8)h.

d. For the performance test required in 60.752(b)(2)(iii)(B), Method 25C or Method 18 of 40 CFR 60 Appendix A shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by 60.752(b)(2)(i)(B). If using Method 18 of Appendix A of this part, the minimum list of compounds to be tested shall be those

published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

Control Efficiency = (NMOCin – NMOCout)/(NMOCin)

Where:

NMOCin = mass of NMOC entering control device

NMOCout = mass of NMOC exiting control device

[40 CFR 60.754 (d)]

(10) After the installation of a collection and control system in compliance with §60.755, the owner or permittee shall calculate the NMOC emission rate for the purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the following equation:

$M_{NMOC} = 0.00189\ (Q_{LFG})\ C_{NMOC}$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

a. The flow rate of landfill gas, Q_{LFG}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of 40 CFR Part 60.

b. The average NMOC concentration, C_{NMOC}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR Part 60. If using Method 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane.

c. The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator of the U. S. Environmental Protection Agency.

[40 CFR 60.754(b)]

g) Miscellaneous Requirements

(1) The permit to install for this emissions unit P902 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hydrogen Chloride

TLV (mg/m3): 2.99 mg/m3

Maximum Hourly Emission Rate (lbs/hr): 3.46 lbs/hr.

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 0.44 ug/m3

MAGLC (ug/m3): 71.2 ug/m3

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, changes in emissions unit location, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the

existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

(2) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, location of the emissions unit, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.