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

1/2/2013

Certified Mail

Facility ID: 0708000033
Permit Number: P0091234
County: Brown

Mr. John Hattersley
Rumpke Sanitary Landfill - Brown County
10795 Hughes Road
Cincinnati, OH 45251-4598

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

Dear Permit Holder:

Enclosed is a finalOhio Environmental Protection Agency (EPA) Air Pollution 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. In this letter you will find the information on the following topics:

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

**How to appeal this permit**

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

**How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

**How to give us feedback on your permitting experience**

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

**How to get an electronic copy of your permit**

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

If you have any questions regarding this permit, please contact the Portsmouth City Health Dept., Air Pollution Unit as indicated on page one of your permit.

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*
Portsmouth City Health Dept., Air Pollution Unit

# FINAL

# Division of Air Pollution Control
# Title V Permit
for
Rumpke Sanitary Landfill - Brown County

| | |
|---|---|
| Facility ID: | 0708000033 |
| Permit Number: | P0091234 |
| Permit Type: | Renewal |
| Issued: | 1/2/2013 |
| Effective: | 1/23/2013 |
| Expiration: | 1/23/2018 |

**Division of Air Pollution Control**
**Title V Permit**
for
Rumpke Sanitary Landfill - Brown County

**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 ..... 7
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 ..... 9
12. Federal and State Enforceability ..... 9
13. Compliance Requirements ..... 9
14. Permit Shield ..... 11
15. Operational Flexibility ..... 11
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 ..... 13
22. Permanent Shutdown of an Emissions Unit ..... 13
23. Title VI Provisions ..... 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only ..... 14
25. Records Retention Requirements Under State Law Only ..... 14
26. Inspections and Information Requests ..... 14
27. Scheduled Maintenance/Malfunction Reporting ..... 15
28. Permit Transfers ..... 15

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

B. Facility-Wide Terms and Conditions ..... 16

C. Emissions Unit Terms and Conditions ..... 18

1. F002, Paved and Unpaved Roadways and Parking Areas ..... 19
2. F003, Composting Storage Piles ..... 27
3. P901, Existing MSW Landfill ..... 33

# Authorization

| | |
|---|---|
| Facility ID: | 0708000033 |
| Facility Description: | Municipal Solid Waste Landfill |
| Application Number(s): | A0022598 |
| Permit Number: | P0091234 |
| Permit Description: | Title V Renewal permit for municipal solid waste landfill with associated equipment, paved and unpaved roadways, and composting storage piles. |
| Permit Type: | Renewal |
| Issue Date: | 1/2/2013 |
| Effective Date: | 1/23/2013 |
| Expiration Date: | 1/23/2018 |
| Superseded Permit Number: | P0091233 |

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

Rumpke Sanitary Landfill - Brown County
9427 Beyers Road
Georgetown, OH 45121-9301

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

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662
(740)353-5156

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 Portsmouth City Health Dept., Air Pollution Unit. 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

Scott J. Nally
Director

# A. Standard Terms and Conditions

## 1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

(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) 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 Portsmouth City Health Dept., Air Pollution Unit.

*(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 contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

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

**8. Fees**

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

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

**9. Marketable Permit Programs**

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

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

**10. Reasonably Anticipated Operating Scenarios**

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

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

**11. Reopening for Cause**

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

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

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

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

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

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

**12. Federal and State Enforceability**

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

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

**13. Compliance Requirements**

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

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

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

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

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

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

c) The permittee shall submit progress reports to the 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 RequirementsUnder State Law Only**

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to 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 RequirementsUnder State Law Only**

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

**26. Inspections and Information Requests**

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

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

**27. Scheduled Maintenance/Malfunction Reporting**

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

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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

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

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

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

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

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

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

# B. Facility-Wide Terms and Conditions

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

   a) None.

2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart WWW, 40 CFR Part 61, Subparts A and M, and 40 CFR Part 63, Subpart AAAA: P901, MSW Landfill Operations.

   The complete NSPS, NESHAP, and MACT requirements, including the NSPS, NESHAP, and MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov.

# C. Emissions Unit Terms and Conditions

## 1. F002, Paved and Unpaved Roadways and Parking Areas

**Operations, Property and/or Equipment Description:**

Paved and Unpaved Roadways and Parking Areas.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI 07-00574 issued 12/23/2008) | Particulate emissions (PE) shall not exceed 58.0 tons per year from the paved and unpaved roadways and parking areas.<br><br>Particulate Matter with a diameter of 10 microns or less ($PM_{10}$) shall not exceed 15.1 tons per year from the paved and unpaved roadways and parking areas. |
| b. | OAC rule 3745-31-05(A)(3)<br>Paved Roadways and Parking Areas | Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.<br><br>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)c through b)(2)g. |
| c. | OAC rule 3745-31-05(A)(3)<br>Unpaved Roadways and Parking Areas | Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.<br><br>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)c through b)(2)g. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| d. | OAC rule 3745-17-07(B) | This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e). |
| e. | OAC rule 3745-17-08(B) | This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B). |

(2) Additional Terms and Conditions

a. The paved roadways that are covered by this permit and subject to the above-mentioned requirements are listed below:

Paved Roadways:

Main parking lot
Office and maintenance lot
Entrance to public MSW drop box
Segment from MSW drop box to unpaved landfill perimeter

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

Unpaved Roadways;

Unpaved truck parking lot
Unpaved heavy equipment lot
Unpaved container lot
Unpaved compost/tire lot
Unpaved segment from landfill perimeter to working phase area
Unpaved landfill perimeter segment to composting/tire shredding area
Unpaved landfill perimeter segment from composting/tire shredding area to paved entrance roadway
Unpaved working phase roadway - top of landfill

c. The permittee shall employ best available control measures on all paved and unpaved 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 paved roadways with water flushing and sweeping, and the unpaved roadways with water or other dust suppressant chemicals at sufficient treatment frequencies to ensure compliance,

along with surface improvements and speed limit. When necessary to prevent the carry out of earth or other materials onto public roadways, all trucks exiting the unpaved landfill roadways shall travel through the wheel wash located before the scale area. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

d. 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 an unpaved roadway 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.

e. 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.

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

g. 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(A)(3).

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 paved and unpaved roadways in accordance with the following frequencies:

| Paved Roadways | Minimum Inspection Frequency |
|---|---|
| all | once daily while in operation |

| Unpaved Roadways | Minimum Inspection Frequency |
|---|---|
| all | once daily while in operation |

[Authority for term: PTI 07-00574 and OAC rule 3745-77-07(C)(1)]

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during

representative, normal traffic conditions. No inspection shall be necessary for a roadway that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI 07-00574 and OAC rule 3745-77-07(C)(1)]

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

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

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

c. the dates the control measures were implemented; and

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

The information required in d)(3)d shall be kept separately for (i)paved roadways and parking areas and (ii) unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI 07-00574 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

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

These deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: PTI 07-00574 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of fugitive dust from paved roadways and parking areas shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation:

Visible emissions of fugitive dust from unpaved roadways and parking areas shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

Emission Limitation:

PE shall not exceed 58.0 tons per year from the paved and unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance with the annual emission limitation may be demonstrated using calculations in AP-42, Sections 13.2.1 and 13.2.2 (November 2006) and inputs representing the Potential To Emit (PTE), as follows for each paved and unpaved roadway as identified in b)(2)a and b)(2)b:

$E = [k(sL/2)^{0.65} (W/3)^{1.5}-C] (1-P/4N)(1-CE)$, for paved roadways

where:

E = emission factor (lb/VMT);

k = particle size multiplier = 0.082;

sL = road surface silt loading, in $g/m^2$ = 7.4;

W = mean vehicle weight, in tons = for each roadways segment;

C = emission factor for exhaust, brake wear and tire wear = 0.00047;

P = number of wet days per averaging period with at least 0.01 inch of precipitation = 130;

N = number of days per averaging period = 365; and

CE = control efficiency from operational parameters outlined in PTI application 07-00574 received September 20, 2006, %=95.

$E= k(s/12)^a (W/3)^b [(365-P)/365](1-CE)$, for unpaved roadways

where:

E = emission factor (lb/VMT);

k = particle size multiplier = 4.9;

s = silt content of road surface material, % = 6.4;

W = mean vehicle weight, in tons = for each roadways segment;

P = number of wet days per averaging period with at least 0.01 inch of precipitation = 130;

a = 0.70 for PM;

b = 0.45 for PM; and

CE = control efficiency from operational parameters outlined in PTI application 07-00574 received September 20, 2006, %=95.

Using the equations and input values above, calculate the emission factor for each paved and unpaved roadway as identified in b)(2)a and b)(2)b. The following equations should be used to calculate the emissions from each roadway:

PE (per roadway) = E(lb/VMT) x vehicle miles traveled per year x 0.0005 ton/lb

Annual emissions are based upon the summation of the emissions from each roadway.

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

$PM_{10}$ emissions shall not exceed 15.1 tons per year from the paved and unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance with the annual emission limitation may be demonstrated using calculations in AP-42, Sections 13.2.1 and 13.2.2 (November 2006) and inputs representing the PTE, as follows for each paved and unpaved roadway as identified in b)(2)a and b)(2)b:

$E = [k(sL/2)^{0.65} (W/3)^{1.5}-C] (1-P/4N)(1-CE)$, for paved roadways

where:

E = emission factor (lb/VMT);

k = particle size multiplier = 0.016;

sL = road surface silt loading, in $g/m^2$= 7.4;

W = mean vehicle weight, in tons = for each roadways segment;

C = emission factor for exhaust, brake wear and tire wear = 0.00047;

P = number of wet days per averaging period with at least 0.01 inch of precipitation = 130;

N = number of days per averaging period = 365; and

CE = control efficiency from operational parameters outlined in PTI application 07-00574 received September 20, 2006, %=95.

$E = k(s/12)^a (W/3)^b [(365-P)/365](1-CE)$, for unpaved roadways

where:

E = emission factor (lb/VMT);

k = particle size multiplier = 1.5;

s = silt content of road surface material, % = 6.4;

W = mean vehicle weight, in tons = for each roadways segment;

P = number of wet days per averaging period with at least 0.01 inch of precipitation = 130;

a = 0.90 for $PM_{10}$;

b = 0.45 for $PM_{10}$; and

CE = control efficiency from operational parameters outlined in PTI application 07-00574 received September 20, 2006, %=95.

Using the equations and input values above, calculate the emission factor for each paved and unpaved roadway as identified in b)(2)a and b)(2)b. The following equations should be used to calculate the emissions from each roadway:

$PM_{10}$ (per roadway) = E(lb/VMT) x vehicle miles traveled per year x 0.0005 ton/lb

Annual emissions are based upon the summation of the emissions from each roadway.

[Authority for term: PTI 07-00574 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

## 2. F003, Composting Storage Piles

**Operations, Property and/or Equipment Description:**

Composting Storage Piles

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>as effective 11/30/01<br>(PTI P0108584 issued 8/31/2011) | Fugitive particulate matter of 10 microns or less ($PM_{10}$) shall not exceed 0.54 ton per year.<br><br>Fugitive particulate emissions (PE) shall not exceed 1.09 tons per year.<br><br>There shall be no visible PE except for one minute during any 60-minute period.<br><br>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See b)(2)c. through b)(2)h.)<br><br>See b)(2)a. |
| b. | OAC rule 3745-31-05(A)(3)<br>as effective 12/1/06 | See b)(2)b. |
| c. | OAC rule 3745-17-07(B) | This emissions unit is exempt from the visible particulate emission limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emission unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08. |
| d. | OAC rule 3745-17-08(B) | This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B) |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1). |

(2) Additional Terms and Conditions

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

*Since these emission limits/control measures no longer apply, the associated monitoring, recordkeeping, reporting and testing requirements (sections d)(1) through d)(7), e)(1) and e(2) and f)(1)) would no longer be required.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE and $PM_{10}$) from this air contaminant source since the uncontrolled potential to emit for PE and $PM_{10}$ is less than ten tons per year.

c. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

d. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

e. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control

measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

f. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee shall water storage piles at sufficient treatment frequencies to ensure compliance.

g. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.

h. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

| storage pile identification | minimum load-in inspection frequency |
|---|---|
| all compost piles | once daily, when in operation |

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

(2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

| storage pile identification | minimum load-out inspection frequency |
|---|---|
| all compost piles | once daily, when in operation |

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

(3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

| storage pile identification | minimum wind erosion inspection frequency |
|---|---|
| all compost piles | once daily, when in operation |

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

(4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

(5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

(6) The permittee may, upon receipt of written approval from the Portsmouth Local Air Agency, modify the above mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above mentioned applicable requirements.

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

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

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

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

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(7)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

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

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

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

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Fugitive $PM_{10}$ emissions shall not exceed 0.54 ton per year.

Fugitive PE shall not exceed 1.09 tons per year.

Applicable Compliance Method:

Compliance with the fugitive PE and $PM_{10}$limitations shall be determined by using the emission factor equations in Section 13.2.4 in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (11/2006), for load-in and load-out operations and using equation 2-12 in USEPA's Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures (BACM). Detailed calculations are available in the air PTI application (submitted 9/2006) for PTI 07-00574 (issued 12/23/2008).

b. Emission Limitation:

There shall be no visible PE except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of

Performance for New Stationary Sources") and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule OAC 3745-17-03.

[Authority for term: PTI P0108584 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**3. P901, Existing MSW Landfill**

**Operations, Property and/or Equipment Description:**

Existing Municipal Solid Waste (MSW) Landfill, with gas collection and control system (Non-NSPS Main Open Flare)-(1,450 scfm), NSPS control devices-(11,955 scfm total), and passive candlestick flares-(1,000 scfm total) which can accept asbestos containing material (ACM).

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3)<br>(PTI P0110361 issued 11/5/2012) | **Fugitive (non stack) emissions shall not exceed the following :**<br>Non-methane organic (NMOC) emissions shall not exceed 488.14 tons per year.<br>Methane ($CH_4$) emissions shall not exceed 75,712 tons per year.<br>Volatile organic compounds (VOC) emissions shall not exceed 193.73 tons per year.<br>Carbon monoxide (CO) emissions shall not exceed 37.02 tons per year.<br>Fluorides (excluding HF) emissions shall not exceed 22.84 tons per year.<br>Hydrogen sulfide ($H_2S$) emissions shall not exceed 11.58 tons per year.<br>Fluorotrichloromethane (CFC-11) emissions shall not exceed 0.99 ton per year.<br>Dichlorodifluoromethane (CFC-12) emissions shall not exceed 18.26 tons per year.<br>Particulate emissions (PE) shall not |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | exceed 0.17 ton per year.<br><br>Particulate Emissions less than 10 microns ($PM_{10}$) shall not exceed 0.08 ton per year.<br><br>Hazardous Air Pollutants (HAP's) emissions shall not exceed 95.08 tons per year.<br><br>See b)(2)a, b)(2)f through b)(2)k and b)(2)v. |
| b. | OAC rule 3745-31-05(A)(3)<br>(PTI P0110361 issued 11/5/2012) | **Emissions from the NSPS control devices (11,955 scfm total) shall not exceed the following:**<br><br>NMOC emissions shall not exceed 1.93 lbs per hour and 8.44 tons per year.<br><br>$CH_4$ emissions shall not exceed 299.01 lbs per hour and 1309.66 tons per year.<br><br>Sulfur dioxide ($SO_2$) emissions shall not exceed 5.50 lbs per hour and 24.09 tons per year.<br><br>Hydrogen chloride (HCl) emissions shall not exceed 8.60 lbs per hour and 37.68 tons per year.<br><br>Hydrogen fluoride (HF) emissions shall not exceed 1.42 lbs per hour and 6.20 tons per year.<br><br>Volatile organic compounds (VOC) emissions shall not exceed 0.77 lb per hour and 3.35 tons per year.<br><br>*Hydrogen Sulfide emissions are assumed to be completely converted to $SO_2$ emissions during combustion of landfill gas in the NSPS control devices.<br><br>CFC-11 emissions shall not exceed 0.0039 lb per hour and 0.017 ton per year.<br><br>CFC-12 emissions shall not exceed 0.072 lb per hour and 0.32 ton per year.<br><br>See b)(2)b and b)(2)r. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| c. | OAC rule 3745-31-05(A)(3)<br>(PTI P0110361 issued 11/5/2012) | **Emissions from the candlestick flares (1,000 scfm total) shall not exceed the following:**<br>$CH_4$ emissions shall not exceed 25.0 lbs per hour and 109.45 tons per year.<br>NMOC emissions shall not exceed 0.16 lb per hour and 0.71 ton per year.<br>$SO_2$ emissions shall not exceed 0.47 lb per hour and 2.05 tons per year.<br>**Emissions from the Non-NSPS Main Open flare (1,450 scfm) shall not exceed the following:**<br>$CH_4$ emissions shall not exceed 36.24 lbs per hour and 158.75 tons per year.<br>NMOC emissions shall not exceed 0.23 lb per hour and 1.02 ton per year.<br>$SO_2$ emissions shall not exceed 0.68 lb per hour and 2.97 tons per year.<br>See b)(2)b and b)(2)r. |
| d. | OAC rule 3745-31-10 through 20. | **Emissions from the NSPS control devices (11,955 scfm total) shall not exceed the following:**<br>CO emissions shall not exceed 79.9 lbs per hour and 350.0 tons per year.<br>Particulate matter and Particulate matter less than 10 microns ($PE/PM_{10}$) emissions shall not exceed 6.10 lbs per hour and 26.71 tons per year.<br>Nitrogen oxide ($NO_x$) emissions shall not exceed 21.78 lbs per hour and 95.39 tons per year.<br>See b)(2)r, b)(2)s and b)(2)z.<br>**Emissions from the candlestick flares (1,000 scfm total) shall not exceed the following:**<br>CO emissions shall not exceed 22.5 lbs per hour and 98.55 tons per year.<br>$PE/PM_{10}/PM_{2.5}$ emissions shall not |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | exceed 0.51 lb per hour and 2.23 tons per year.<br>$NO_x$ emissions shall not exceed 1.2 lbs per hour and 5.26 tons per year.<br>See b)(2)r and b)(2)s.<br><br>**Emissions from the Non-NSPS Main Open flare (1,450 scfm) shall not exceed the following:**<br>CO emissions shall not exceed 32.63 lbs per hour and 142.90 tons per year.<br>PE/$PM_{10}$ emissions shall not exceed 0.74 lb per hour and 3.24 tons per year.<br>$NO_x$ emissions shall not exceed 1.74 lbs per hour and 7.62 tons per year.<br>See b)(2)r and b)(2)s. |
| e. | 40 CFR Part 60, Subpart WWW (40 CFR Part 60.750-759) | When the calculated NMOC rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall either control the NMOC emissions by 98 percent, by weight, or reduce the outlet NMOC concentration to less than 20 ppm by volume, dry basis as hexane at 3 percent oxygen.<br>See b)(2)b through b)(2)e and b)(2)l through b)(2)q. |
| f. | 40 CFR Part 60.18(c)(1) | See b)(2)b and b)(2)d. |
| g. | 40 CFR Part 63, Subpart AAAA (40 CFR Part 63.1930 – 1990)<br><br>(In accordance with 63.1940(a), this affected source is a MSW Landfill that meets the criteria in 40 CFR 63.1935(a) or (b).] | This subpart requires all landfills to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and requires such landfills to meet the startup, shutdown and malfunction (SSM) requirements of the general provisions of this part. |
| h. | 40 CFR Part 61, Subparts A and M and OAC Chapter 3745-20 | See b)(2)t, b)(2)u, and b)(2)y.<br>See b)(2)aa, c)(9) and c)(10). |

(2) Additional Terms and Conditions

a. For all waste materials except asbestos-containing materials:

i. visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average; and

ii. thepermittee shall use best available control measures to minimize or eliminate the emissions of fugitive dust as specified in sections b)(2)g and b)(2)i.

b. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart WWW and 40 CFR Part 60.18(c)(1) if open flares are installed for compliance with 40 CFR Part 60, Subpart WWW.

c. When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the active collection system shall satisfy the following requirements, as specified in 40 CFR Part 60.752(b)(2)(ii)(A):

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

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

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

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

d. When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall comply with either i., ii. or iii. below as well as the rest of b)(2)d:

i. All landfill gas collected shall be routed to a control system designed and operated within the parameters demonstrated during the performance test to reduce non-methane organic compound (NMOC) emissions by 98% by weight, or reduce the outlet NMOC emission concentration to less than 20 parts per million (ppm), by volume, dry basis as hexane at 3% oxygen. The reduction efficiency or ppm by volume, shall be established by an initial performance test to be completed no later than 180 days after initial startup of the approved new control system using the test methods specified in 40 CFR Part 60.754(d).

ii. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR Part 60.752(b)(2)(iii)(A) or (B).

iii. The open 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.

iv. The open flare shall be operated with a flame present at all times. When the open flare is not combusting gas, the presence of a flame is not required.

v. The permittee shall comply with either the requirements in paragraphs (a) and (b) or the requirements in paragraph (c) or the requirements in paragraph (d):

(a) The open flare 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 open flare is nonassisted. The net heating value of the gas being combusted shall be determined as follows:

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 offgas 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 10-7 (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 or 90 (Reapproved 1994); 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 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR Part 60.17) if published values are not available or cannot be calculated.

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

(i) steam-assisted and nonassisted open flares 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

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

Log10 (Vmax) = (Ht + 28.8)/31.7

where:

Vmax = the maximum permitted velocity, M/sec;

28.8 = constant;

31.7 = constant; and

Ht = the net heating value as determined in section b)(2)d.v.(a) above.

(c) The open flare shall have a diameter of 3 inches or greater, are nonassisted, 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 = the maximum permitted velocity, in 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.

(d) An air-assisted open 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 = the maximum permitted velocity, m/sec;

8.706 = constant;

0.7084 = constant; and

Ht = the net heating value as determined in section b)(2)d.v.(a) above.

e. When the calculated NMOC rate is greater than or equal to 50 megagrams per year (55.1 tpy), the collection and control system may be capped or removed provided that all of the following conditions, as specified in 40 CFR Part 60.752(b)(2)(v), are met:

i. The landfill shall be no longer accepting solid waste and be permanently closed (pursuant to 40 CFR Part 258.60).

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

iii. The calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year (55.1 tpy) on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

f. All landfill areas where solid wastes are deposited are covered by this permit and subject to the requirements of OAC rule 3745-31-05.

g. The permittee shall employ best available control measures on all landfill operations associated with the load-in of MSW 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 minimizing drop heights and watering of dusty materials, either prior to dumping or during dumping, and good operating practices to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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

i. The permittee shall employ best available control measures for wind erosion from the surface of the landfill 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 watering dusty loads prior to dumping during periods of high wind speed to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

j. The above-mentioned control measures shall be employed for wind erosion from the landfill if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are

necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for the landfill cell that is covered with snow and/or ice if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

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

l. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year (55.1 tpy), the permittee shall comply with the requirements specified in 40 CFR 63.1955(b) and 63.1960 through 63.1980, in accordance with 40 CFR 63.1945(d), by the date the permittee is required to install a collection and control system as specified in 40 CFR 60.752(b)(2) of Subpart WWW.

m. For compliance with the surface methane operational standard as provided in c)(4), when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy) the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

n. The provisions of this permit under the authority of 40 CFR Part 60, 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 or control devices.

o. When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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 Administrator:

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.

p. When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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 d)(19). 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 Administrator 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 Administrator 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:

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

where:

Qi = NMOC emission rate from the ith 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 ith section, in megagrams;

ti = age of the solid waste in the ith section, in years;

Cnmoc = concentration of nonmethane organic compounds, in parts per million by volume; and

$3.6 \times 10^{-9}$ = conversion factor.

iii. The values for k, Lo, and Cnmoc 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 Cnmoc are provided below:

k* = 0.05 per year;

Lo = 170 cubic meters per megagram; and

Cnmoc = 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 meteorologic site, the k value to be used is 0.02 per year.

q. When the permittee constructs new gas collection devices and the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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.

r. The hourly emission limitations are established for PTI purposes to reflect the emissions unit's potential to emit. Therefore, no record keeping, monitoring and/or reporting requirements are necessary to ensure compliance with these limitations.

s. All particulate emissions from the NSPS Control Devices, Non-NSPS Main Open Flare and Candlestick flares are particulate matter less than 10 micron in diameter ($PM_{10}$).

t. The landfill, approved to accept asbestos-containing waste materials shall maintain the following work practice standards:

   i. There shall be no visible emissions from asbestos-containing waste materials during on-site transportation, transfer, unloading, deposition, compacting operations, or from any inactive asbestos waste disposal sites.

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

   iii. 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 waste 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.

   If on the basis of the inspection, the waste material is found to be improperly received, the load shall be disposed of in accordance with the procedures in the “Asbestos Spill Contingency Plan,” and the discrepancy shall be noted on the waste shipment record.

u. The permittee shall develop, implement, and maintain an "Asbestos Disposal Operating Procedure and Spill Contingency Plan" consisting of:

   i. authorized personnel training;
   ii. inspection and disposal operating procedures;
   iii. non-conforming load response procedures;
   iv. inventory and maintenance procedures for safety and emissions control equipment;
   v. record keeping procedures; and
   vi. 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. 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

v. Hydrogen Sulfide Emissions Contingency Plan

   As part of the best available technology requirements under OAC rule 3745-31-05(A)(3), Ohio EPA may request the permittee to develop and implement a hydrogen sulfide emissions contingency plan. If requested, the contingency plan

shall meet the requirements detailed in rules developed in response to House Bill (H.B.) 397.

Under H.B. 397 signed by the governor December 22, 2005, Ohio EPA is required to develop rules governing the operation of construction and demolition debris (C&DD) landfills. One part of this bill requires Ohio EPA to require C&DD facilities to develop and implement a contingency plan for the effective action in response to hydrogen sulfide or other gas emissions. However, Ohio EPA believes it may become important for facilities other than C&DD landfills to have in place a contingency plan to deal with potential hazardous emissions. Therefore, as a condition of this permit, if requested, the permittee will be required to develop and implement a hydrogen sulfide/other gas emission contingency plan consistent with the requirements developed in response to H.B. 397.

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

x. Pursuant to the authority in ORC section 3704.03(L), any authorized representative of the Director may, upon presentation of proper identification, enter at any reasonable time upon any portion of the property where this landfill is located, including any improvements thereon, to make inspections; take samples; conduct tests; examine records or reports pertaining to any emissions of air contaminants; and inspect monitoring equipment, emissions control equipment, and/or methods of operation and gas sampling. No operator or agent of this landfill shall act in any manner to refuse, hinder, or thwart this legal right of entry.

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

z. The permittee is required to perform a Best Available Control Technology (BACT) review for $NO_x$, CO and PE. The emissions limits based on the BACT requirements are listed under OAC rule 3745-31-(10) through (20) above. The following determinations have been made for this emissions unit:

i. For $NO_x$, CO and $PM_{10}$ , a well designed and well operated gas collection system and an enclosed combustor system capable of reducing NMOC in the collected gas by 98% or an enclosed combustor outlet concentration of 20 ppmvd as hexane at 3% oxygen. The enclosed combustor stations will be added on a phased schedule to match the LFG generation rates.

An open flare or landfill gas recovery system may also be installed, provided compliance with the requirements of NSPS 40 CFR 60 Subpart WWW and the emissions limits in section C.3.b)(1)b. and d. are maintained.

aa. The application and enforcement of the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 61, are delegated to the

Ohio Environmental Protection Agency. The requirements of 40 CFR Part 61 are also federally enforceable.

c) Operational Restrictions

(1) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(a)]

(2) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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);

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

c. a decommissioned well (the well may experience a static positive pressure after shutdown to accommodate for declining flows; all design changes shall be approved by the Director of the Ohio EPA).

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(b)]

(3) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit) and with either a nitrogen level less than 20% or an oxygen level less than 5%. The permittee may establish a higher operating temperature, nitrogen, or oxygen level 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(c)]

(4) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(d)]

(5) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with section b)(2)d. In the event the collection or control system is inoperable, the gas mover system

shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(e)]

(6) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall operate the NSPS control devices and/or gas recovery system at all times when the collected gas is routed to the system.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(f)]

(7) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the open flare shall be equipped with 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 the flame when the open flare is in operation.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), and 40 CFR 60.756(c)(1)]

(8) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall operate the control device within the parameter ranges established during the initial or most recent performance test. The parameters established shall be based on the control device installed and may include a heat sensing device, gas flow rate measuring, and/or temperature monitoring device.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.752(b)(2)(iii)(B)(2)]

(9) The permittee shall establish restricted access, adequate to deter the unauthorized entry of the general public and any unauthorized personnel, within 100 feet of the unloading, deposition, and burial areas for the asbestos-containing waste materials. 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
2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) San Serif, Gothic or Block
14 Point Gothic
Spacing between any two lines must be at least equal to the height of the upper of the two lines.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 61.154(b)] and [OAC rule 3745-20-06(B)(4) and (5)]

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

a. 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.

b. Care shall be taken to ensure that disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of this permit.

c. Asbestos-containing waste materials shall be separated from the landfill final grade by no less than 24 inches of compacted non-asbestos-containing materials and a permanent cover of vegetation, or in accordance with current requirements for closure, whichever is more stringent

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.151(a), 40 CFR 61.154(c) and (g)],OAC rule 3745-20-06(B)(3), and OAC rule 3745-20-07(A)(2) and (3)]

(11) When the calculated NMOC emission rate is greater than or equal to 50 megagrams/yr (55.1 tpy), the permittee shall either burn the gas in the NSPS control devices and/or an energy recovery piece of equipment, as required above, or collect and sell the gas as fuel.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.752(b)(2)]

(12) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the collection system shall be designed to meet the requirements of 40 CFR Part 60.759.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.759]

(13) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall comply with the general provisions outlined in Table 1 of 40 CFR Part 63, Subpart AAAA.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 63.1955(d)(1)]

(14) The authorized maximum daily waste receipt (AMDWR) of solid waste as defined in OAC rule 3745-27-01(S)(23) shall not exceed 3,000 tons excluding composting raw material and unprocessed and/or shredded tires. This daily limit may be exceeded if approved in writing by the Director of the Ohio EPA.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(15) 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(g)]

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

| | |
|---|---|
| 40 CFR Part 63.1955 | Comply with the requirements of 40 CFR Part 60, Subpart WWW. |

[Authority for term: P0110361, 40 CFR Part 60, and 40 CFR Part 63]

d) Monitoring and/or Recordkeeping Requirements

(1) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy) for the active gas collection system, the permittee shall install a sampling port and a thermometer or other temperature measuring device at each wellhead and record the following information on a monthly basis:

a. the gauge pressure in the gas collection header at each individual well;

b. the nitrogen or oxygen concentration in the landfill gas, in percent; and

c. the temperature of the landfill gas,in degrees Fahrenheit.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.756(a)]

(2) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall monitor surface concentrations of methane on a quarterly basis as follows:

The permittee shall monitor surface concentrations of methane on a quarterly basis according to the instrument specifications and procedures provided below. Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may revert to annual monitoring; however, during the annual monitoring, any methane reading of 500 ppm or more above background detected, returns the frequency for that landfill back to quarterly monitoring. The permittee shall monitor surface concentrations of methane on a quarterly basis as follows:

a. Surface concentrations of methane shall be monitored, in ppm, along the entire perimeter of the collection area and along a pattern spaced 30 meters apart (or a site-specific established spacing) and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover for each collection area;

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

c. Surface emission monitoring shall be performed in accordance with Section 8.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions; and

d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements listed in c)(4).

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

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

iii. If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for the installation may be submitted to the Portsmouth Local Air Agency for approval. No further monitoring of that location is required until the action specified has been taken.

iv. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day remonitoring specified above shall be remonitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified above shall be taken.

v. For any location where the monitored methane concentration equals or exceeds 500 ppm 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, unless an alternative remedy has been approved by the Portsmouth Local Air Agency.

e. The monitor used shall meet the requirements of 40 CFR 60.755(c).

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1),40 CFR 60.755(c) and 40 CFR 60.756(f)]

(3) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee 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 when the open flare is in operation; and

b. agas flow rate measuring device that shall record the flow to the control device at least every 15 minutes.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.756(c)]

(4) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), if a gas flow rate measuring device is not installed on an open flare or enclosed combustor, then the permittee shall secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.756(b]

(5) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall maintain the following information for the life of the control equipment as measured during the initial performance test or compliance demonstration:

a. the maximum expected gas generation flow rate as calculated based on the following:

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

Qm = 2Lo x R x {(e to the power of -kc) - (e to the power of -kt)}

where:

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

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

R = the average annual acceptance rate, in megagrams per year;

k = the methane generation rate constant, per year;

t = the age of the landfill at equipment installation plus the time the permittee 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), in years; and

c = time since closure, in years (for an active landfill c = 0 and e to the power of -kc = 1).

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

Qm = summation of 2kLoMi x (e to the power of -kti for i=1 through i=n)

where:

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

k = the methane generation rate constant, per year;

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

Mi = the mass of solid waste in the ith section, in megagrams; and

ti = the age of the ith section, in years.

iii. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in d)(5)a.i and d)(5)a.ii. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in d)(5)a.i or d)(5)a.ii or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Ohio EPA.

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

c. the open flare type (i.e., steam-assisted, air-assisted, or non-assisted);

d. all visible particulate emission readings;

e. the heat content determinations of the gas;

f. the flow rate or bypass flow rate measurements;

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

h. the continuous records of the open flare pilot flame or flare flame monitoring and records of all periods of operations during which the open flare pilot flame or open flare flame was absent.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 60.758(b)(4) and 40 CFR 60.758(b)(1)]

(6) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall maintain, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(d)]

(7) The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity of the landfill, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either hardcopy or electronic formats are acceptable. These records, may also be required by the OEPA, Division of Materials and Waste Management, and shall satisfy this permit condition.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(a)]

(8) Except as otherwise provided in this section, the permittee shall perform inspections of the landfill operation areas in accordance with the following frequencies:

| landfill areas | minimum inspection frequency |
|---|---|
| all landfill areas | once daily while in operation |

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(9) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures specified in this permit for load-in of a MSW landfill cell and wind erosion from the surface of a MSW landfill cell. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for a landfill operating area or storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(10) The permittee may, upon receipt of written approval from the Portsmouth Local Air Agency, modify the above-mentioned inspection frequency if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified inspection frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

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

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

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

c. the dates the control measures were implemented; and

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

The information required in (11)d. shall be kept separately for (i) the solid waste load-in operations, (ii) the surface working operations, and (iii) the cell surface (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(12) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall install a sampling port and a thermometer or other temperature measuring device, or an access port for temperature measurements at each wellhead.

a. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with b)(2)c.iii., the permittee 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 c)(2). 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 for approval. The permittee is not required to expand the gas collection system during the first 180 days after its initial startup.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.755(a)(3) and (4)]

b. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in (d)(1). 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 exceedance of other operational or performance standards. An alternate timeline for correcting the exceedance may be submitted to the Director for approval.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.755(a)(5)]

(13) The permittee shall maintain daily records of the amount of landfill (solid) waste as defined in OAC rule 3745-27-01(S)(23) (i.e., excluding composting raw material and unprocessed and/or shredded tires) received.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(14) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the NSPS enclosed combustor when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time during which the average combustion temperature within any NSPS enclosed combustor was more than 82.4 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent performance test that demonstrated compliance; and

b. a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), and 40 CFR 60.758(c)(1)(i)]

(15) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee of a controlled landfill subject to the provisions of 40 CFR Part 60, Subpart WWW shall keep for 5 years up-to-date, readily accessible continuous records of the control equipment operating parameters specified to be monitored in d(1) through d)(3) and d)(14), 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(c)]

(16) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee 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 d)(3) and d)(4).

[Authority for term: PTIP0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(c)(2)]

(17) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall keep up-to-date, readily accessible continuous records of the open flare flame or open flare pilot flame monitoring specified under d)(3), and up-to-date, readily accessible records of all periods of operation in which the open flare flame or open flare pilot flame is absent.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1),and 40 CFR 60.758(c)(4)]

(18) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under b)(2)c. of this permit.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(d)(1)]

(19) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos containing and/or nondegradable waste excluded from collection as provided in b)(2)p.i, as well as any nonproductive areas excluded from collection as provided in b)(2)p.ii.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(d)(2)]

(20) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee 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 c)(1) through c)(6), the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.758(e)]

(21) The permittee shall maintain a waste shipment record for all ACM regulated under 40 CFR Part 61 and OAC rule 3745-20. The waste shipment record shall be legible, complete, signed and dated by the waste generator and waste disposal site operator, and shall include the following information:

a. the name of the work site or facility where the asbestos-containing waste was generated and the mailing address and telephone number of the facility owner;

b. the name, mailing address, and telephone number of the owner or operator (waste generator) responsible for handling, packing, marking, and labeling the asbestos-containing waste material;

c. the name, mailing address, telephone number, and site location of the active waste disposal site designated by the generator to receive the asbestos-containing waste material for disposal;

d. the name and address of the local, State, or U.S. EPA regional office responsible for administering the asbestos NESHAP program;

e. description of the asbestos-containing waste materials included in the waste shipment;

f. the number and type of containers included in the waste shipment;

g. the approximate volume of asbestos-containing waste material included in the waste shipment, in cubic yards;

h. special handling instructions or additional information relative to the waste shipment the generator may specify;

i. a certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations;

j. the name, address, and telephone number of the transporter;

k. a signature by the transporter to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in section d)(21)a. through d)(21)i;

l. a discrepancy indication space to be completed by the transporter or waste shipment owner or operator if any improperly contained asbestos waste is observed or if there is any discrepancy in the quantity of asbestos shipped and the quantity of asbestos waste received at the asbestos waste disposal site;

m. the name and telephone number of the disposal site operator;

n. a signature by the waste disposal site operator to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in section d)(21)a through i, except as noted in the discrepancy indication space; and

o. the date of receipt of the asbestos-containing waste.

Significant amounts of improperly contained waste shall be reported in writing to the Portsmouth Local Air Agency by the following working day. The report shall include a copy of the waste shipment. The waste shipment record forms shall be retained at the facility for at least two years, and shall be made available for inspection upon request.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(e) and OAC rule 3745-20-05(E)]

(22) The permittee shall maintain records of the location, depth, area, and quantity in cubic yards of all asbestos-containing waste material within the disposal site, on a map or a diagram of the disposal area.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(f) and (g) and OAC rule 3745-20-06(C)(2)]

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

| | |
|---|---|
| 40 CFR Part 63.1980(a) | Keep records and reports as specified in 40 CFR Part 60, Subpart WWW. |
| 40 CFR Part 63.1980(b) | 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. |

[Authority for term: PTI P0110361, 40 CFR Part 60, and 40 CFR Part 63]

e) Reporting Requirements

(1) The permittee shall submit an annual NMOC emission rate report which contains an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR Part 60.754(a) or (b), as applicable. If the estimated NMOC emission rate as reported in the annual report is less than 50 megagrams per year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Portsmouth Local Air Agency. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Portsmouth Local Air Agency. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.757(b)]

(2) The permittee shall submit a closure report to the Portsmouth Local Air Agency within 30 days of waste acceptance cessation. The Ohio EPA may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR Part 258.60. If a closure report has been submitted to the Ohio EPA, no additional wastes may be placed into the landfill without filing a notification of modification as described in 40 CFR Part 60.7(a)(4).

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1),and 40 CFR 60.757(d)]

(3) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall submit an equipment removal report to the Portsmouth Local Air Agency 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in 40 CFR Part 60.757(e)(1). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752(b)(2)(v) have been met.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1),and 40 CFR 60.757(e)]

(4) The permittee shall submit deviation(excursion) reports that identify any of the following occurrences:

a. each day during which an inspection of the fugitive dust sources was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation;

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

c. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), any record which indicates that the gauge pressure in the gas collection header at each individual well was positive;

d. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), any record which indicates that the nitrogen or oxygen concentration in the landfill gas was greater than or equal to 20% or 5%, respectively;

e. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), any record which indicates that the temperature of the landfill gas was greater or equal to 55 degrees Celsius (131 degrees Fahrenheit);

f. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), any record which indicates that the surface concentration of methane was greater than or equal to 500 parts per million above background, if applicable;

g. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), all periods during which the open flare pilot flame or open flare flame was not present when the open flare was in operation (the reports shall include the date, time, and duration of each such period); and

h. when the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow or any record which indicates that the bypass line valve was not maintained in the closed position.

These reports shall be submitted in accordance with the reporting requirements specified in Standard Term and Conditions of this permit.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(5) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall submit semi-annual reports which include the following:

a. all periods when the collection system was not operating in excess of 5 days; and

b. any record indicating the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR Part 60.755(a)(3), (b), and (c)(4).

c. description and duration of all periods when the control device or recovery and treatment system was not operating for a period exceeding 1 hour and the length of time the control device or recovery and treatment system was not operating.

d. identification of each 3-hour period of operation during which the average combustion temperature within the NSPS enclosed combustor, was more than 82.4 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent performance test that demonstrated compliance.

These reports shall be submitted by January 31 and July 31 of each year.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 63.1955(c), 63.1980(a) and 40 CFR 60.757(f)]

(6) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the permittee shall submit the following information with the initial performance test report required pursuant to 40 CFR Part 60.8:

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

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

c. the documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

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

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

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

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.757(g)]

(7) The permittee shall notify the Portsmouth Local Air Agency in writing of any daily record which shows that the amount of landfill (solid) waste as defined in OAC rule 3745-27-

01(S)(23) (i.e., excluding composting raw material and unprocessed and/or shredded tires) received exceeded 3,000 tons without prior approval by the Director of the Ohio EPA. The notification shall include a copy of such record and shall be sent to the Portsmouth Local Air Agency within 30 days after the exceedance occurs.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(8) As outlined in 40 CFR Part 63.1965, a deviation occurs when the control device operating parameter boundaries described in 40 CFR Part 60.758(c)(1) of Subpart WWW are exceeded. A deviation also 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 63.1965(a) and (b)]

(9) The permittee shall submit quarterly written reports that (a) identify all days during which any visible emissions of fugitive dust were observed from asbestos-containing materials during on-site transportation, transfer, unloading, deposition, and/or compacting operations and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Portsmouth Local Air Agency by January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(10) The permittee shall submit quarterly reports summarizing the asbestos disposal activities. These 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; and

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.

These quarterly reports shall be submitted no later than January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(i), in part and OAC rule 3745-20-05, in part]

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

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(e)(2) and OAC rule 3745-20-05(E)(2)(b)(ii)]

(12) Upon discovery of a discrepancy between the quantity of asbestos-containing waste material 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 U.S. EPA regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and The Portsmouth Local Air Agency) if the waste was received from out of State. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(e)(3) and OAC rule 3745-20-05(E)(2)(b)(iii)]

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

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1),40 CFR 61.154(h) and OAC rule 3745-20-06(E)]

(14) The permittee shall notify the Portsmouth Local Air Agency, 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.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(j), OAC rule 3745-20-06(F), and OAC rule 3745-20-07(D)]

(15) The permittee shall notify the Portsmouth Local Air Agency 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, if available, or when waste is not shipped with a waste shipment record, 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 Portsmouth Local Air Agency is informed and provided the opportunity to inspect.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), 40 CFR 61.154(e), in part and OAC rule 3745-20-05(E)(2)(b)(i), in part]

(16) The permittee shall also submit annual reports that specify the total NMOC, CO, PE, $PM_{10}$, $NO_x$, $SO_2$, HCl, HF, $H_2S$, $CH_4$, CFC-11 and CFC-12 emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(17) The permittee shall submit semiannual reports and such other notifications and reports to the Administrator and/or the Portsmouth Local Air Agency as are required pursuant to 40 CFR Part 63, Subpart AAAA per the following sections:

| | |
|---|---|
| 40 CFR 63.1980(a) | Submit the annual report described in 40 CFR 60.757(f) every 6 months. |

[Authority for term: PTI P0110361 and 40 CFR Part 63]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

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

When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), there shall be no visible particulate emissions from the open flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

<u>Applicable Compliance Method:</u>

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in 40 CFR Part 60.18

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

Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the visible particulate emission observations performed in accordance with the procedures specified in Test Method 9 and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

c. Emission Limitations:

Emissions from the NSPS control devices [11,955 scfm total]-(stack emissions) shall not exceed the following:

NMOC emissions shall not exceed 1.93 lbs/hr and 8.44 tons/yr;
CO emissions shall not exceed 79.90 lbs/hour and 350.0 tons/yr;
PE emissions shall not exceed 6.10 lbs/hour and 26.71 tons/yr;
$NO_x$emissions shall not exceed 21.78 lbs/hr and 95.39 tons/yr; and
HClemissions shall not exceed 8.60 lbs/hr and 37.68 tons/yr.

Applicable Compliance Methods:

Compliance with the hourly emissions limitations for enclosed combustors shall be demonstrated through the emissions testing requirements specified in f)(5) below.

Compliance with the hourly emission limitations for open flares shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 07-00574 submitted September 20th, 2006. The emission factors used for NMOC, PE, and HCl were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98. The CO and $NO_x$ emission factors were based on flare manufacturer specifications.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

d. Emission Limitations:

Emissions from the NSPS control devices [11,955 scfm total]-(stack emissions) shall not exceed the following:

$CH_4$ emissions shall not exceed 299.01 lbs/hr and 1309.66 tons/yr.
VOC emissions shall not exceed 0.77 lbs/hr and 3.35 tons/yr;
HF emissions shall not exceed 1.42 lbs/hr and 6.20 tons/yr;
$PM_{10}$ emissions shall not exceed 6.10 lb/hr and 26.71 tons/yr;
$SO_2$ emissions shall not exceed 5.50 lbs/hr and 24.09 tons/yr;
CFC-11 emissions shall not exceed 0.0039 lb/hr and 0.017 ton/yr; and
CFC-12 emissions shall not exceed 0.072 lb/hr and 0.32 ton/yr.

Applicable Compliance Methods

If required, compliance with the hourly emission limitations for enclosed combustors shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6, and 13 for SO2, and HF respectively, and 40 CFR Part 51, Appendix M, Method 201 for PM-10. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the hourly methane, VOC, CFC-11, and CFC-12 emission limitations for enclosed combustors and the hourly emission limitations for open flares shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 07-00574 submitted September 20th, 2006. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

e. Emission Limitations:

Fugitive emissions from this emissions unit shall not exceed the following:

CO emissions shall not exceed 37.02 tons/yr;
PE emissions shall not exceed 0.17 ton/yr;
$PM_{10}$ emissions shall not exceed 0.08 ton/yr;
$H_2S$ emissions shall not exceed 11.58 tons/yr;
VOC emissions shall not exceed 193.73 tons/yr;
CFC-11 emissions shall not exceed 0.99 ton/yr; and
CFC-12 emissions shall not exceed 18.26 tons/yr.

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 07-00574 submitted September 20th, 2006. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98 and AP-42 Section 13.2.4 dated 11/06.

f. Emission Limitations:

Fugitive emissions of non-methane organic compounds (NMOC) shall not exceed 488.14 tpy.

Fugitive emissions of $CH_4$ shall not exceed 75,712 tpy.

Total fugitive emissions of hazardous air pollutants (HAP's) shall not exceed 95.08 tpy.

Fugitive emissions of fluorides (excluding HF) shall not exceed 22.84 tpy.

Applicable Compliance Method:

These emissions represent the highest gas generation/emissions rates which could occur, based on the proposed landfill capacity of 64,213,599 megagrams at the maximum receiving rate of 3,000 tons of waste material per day. The landfill emissions and limitations contained in this permit can be documented as follows:

i. NMOC emissions were calculated by theLandfill Gas Emission Model (LandGEM), Version 3.02, May 2005.

ii. $CH_4$ emissions were calculated by the Landfill Gas Emission Model (LandGEM), Version 3.02, May 2005.

iii. HAP emissions were calculated by the Landfill Gas Emission Model (LandGEM), Version 3.02, May 2005.

iv. Fluoride emissions were calculated by Landfill Gas Emission Model (LandGEM), Version 3.02, May 2005.

g. Emission Limitations:

Emissions from the candlestick flares [1,000 scfm total] shall not exceed the following:

CO emissions shall not exceed 22.50 lbs/hr and 98.55 tpy;
$CH_4$ emissions shall not exceed 25.0 lbs/hr and 109.45 tpy;
NMOC emissions shall not exceed 0.16 lbs/hr and 0.71 tpy;
$NO_x$ emissions shall not exceed 1.2 lbs/hr and 5.26 tpy;
PE/$PM_{10}$ emissions shall not exceed 0.51 lbs/hr and 2.23 tpy; and
$SO_2$ emissions shall not exceed 0.47 lbs/hr and 2.05 tpy.

Applicable Compliance Method:

Compliance with the hourly emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as provided in a letter to Portsmouth Local Air Agency on November 27, 2007. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

h. Emission Limitations:

Emissions from the Non-NSPS Main Open Flare [1,450 scfm] shall not exceed the following:

CO emissions shall not exceed 32.63 lbs/hr and 142.90 tpy;
$CH_4$ emissions shall not exceed 36.24 lbs/hr and 158.75 tpy;
NMOC emissions shall not exceed 0.23 lbs/hr and 1.02 tpy;
$NO_x$ emissions shall not exceed 1.74 lbs/hr and 7.62 tpy;
$PE/PM_{10}$ emissions shall not exceed 0.74 lbs/hr and 3.24 tpy;
$SO_2$ emissions shall not exceed 0.68 lbs/hr and 2.97 tpy.

Applicable Compliance Method:

Compliance with the hourly emission limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application P0110361 submitted June 27, 2012. The emission factors used were USEPA's Landfill Gas Emissions Model along with AP-42 Section 2.4 dated 11/98.

The annual emission limitations were established by multiplying the hourly emission limitations by 8,760 and dividing by 2,000 lbs/ton. Therefore, provided that the permittee complies with the hourly emission limitations compliance with the annual emission limitations will also be demonstrated.

i. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c)of OAC rule 3745-17-03.

j. Emission Limitation:

Control efficiency of 98%, by weight, or reduce the outlet NMOC emission concentration to less than 20 ppm.

Applicable Compliance Method:

Emission testing (see f)(5) below), using the following test methods to demonstrate compliance:

NMOC - methods 1 through 4 and 25, 25A, 25C or 18, as appropriate, of 40 CFR Part 60, Appendix A (Alternative U.S. EPA-approved test methods may be used with prior approval from the Portsmouth Local Air Agency.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(2) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the nitrogen level shall be determined using Method 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i).

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), and 40 CFR 60.753(c)(1)]

(3) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy), the oxygen level shall be determined by an oxygen meter using Method 3A or 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i), except that:

a. the span shall be set so that the regulatory limit is between 20 and 50% of the span; a data recorder is not required;

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

c. a calibration error check is not required; and

d. the allowable sample bias, zero drift, and calibration drift are plus or minus 10%.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.753(c)(2)]

(4) When the calculated NMOC rate is greater than or equal to 50 megagrams (55.1 tpy), the permittee shall conduct or have conducted, within 180 days after the installation of the collection and control system, an initial performance test to demonstrate that the open flare can operate in conformance with the requirements specified in 40 CFR Part 60.18. The net heating value of the gas being combusted in the open flare and the actual exit velocity of the open flare shall be determined in accordance with the procedures and methods specified in 40 CFR Part 60.18. The visible emission evaluation shall be conducted in accordance with the procedures specified in f)(1)a.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.754(e)]

(5) When the calculated NMOC rate is greater than or equal to 50 megagrams (55.1 tpy), the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing of the new NSPS enclosed combustors shall be conducted within 6 months after initial startup of the control system;

b. the emission testing shall be conducted to demonstrate compliance with the PE, $NO_x$, CO, HCl and NMOC stack emission limitations specified in b)(1) of these terms;

c. the following test methods shall be employed to demonstrate compliance with the emission limitations:

PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A;
NOX, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;

CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A;
HCl, Methods 1 through 4 and 26 of 40 CFR Part 60, Appendix A; and
NMOC , Methods 1 through 4 and 25, 25A, 25C or Method 18 as appropriate, of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Portsmouth Local Air Agency.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Portsmouth Local Air Agency

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

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

g. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.752(b)(2)(iii)(B)]

(6) When the calculated NMOC rate is greater than or equal to 50 megagrams (55.1 tpy), the flow rate of landfill gas, Qlfg, 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.

[Authority for term: PTI P0110361 and OAC rule 3745-77-07(C)(1)]

(7) The average NMOC concentration, Cnmoc, 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 25, 25C or 18, as appropriate, of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, 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 permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR Part 60 by 6 to convert from Cnmoc as carbon to Cnmoc as hexane.

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1), and 40 CFR 60.754(b)(2)]

(8) After the installation of a collection and control system in compliance with 40 CFR Part 60.755, the permittee shall calculate the NMOC emission rate for the purpose of determining when the system can be removed as provided in 40 CFR Part 60.752(b)(2)(v) in accordance with the equation and procedures specified in 40 CFR Part 60.754(b), (b)(1), and (b)(2). The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Ohio EPA as provided in 40 CFR Part 60.752(b)(2)(i)(B).

[Authority for term: PTI P0110361, OAC rule 3745-77-07(C)(1) and 40 CFR 60.754(b)]

(9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install # P0110361, issued on November 5th, 2012: [f)(1) through f)(8)]. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]

g) Miscellaneous Requirements

(1) None.