



State of Ohio Environmental Protection Agency

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12/23/2008

Certified Mail

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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0708000033
Permit Number: 07-00574
Permit Type: Initial Installation
County: Brown

No	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR
No	CEMS
Yes	MACT
Yes	NSPS
Yes	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

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

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

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

Sincerely,

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

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install
for
Rumpke Sanitary Landfill - Brown County**

Facility ID: 0708000033
Permit Number: 07-00574
Permit Type: Initial Installation
Issued: 12/23/2008
Effective: 12/23/2008



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Permit-to-Install
 for
 Rumpke Sanitary Landfill - Brown County

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

Authorization

Facility ID: 0708000033
Facility Description: Rumpke Sanitary Landfill
Application Number(s): A0007387
Permit Number: 07-00574
Permit Description: Rumpke plans to modify the emission unit P901, to increase the capacity of of the landfill and allow for disposal of asbestos containing waste material regulated under 40 CFR 61 Subpart M.
Permit Type: Initial Installation
Permit Fee: \$1,650.00
Issue Date: 12/23/2008
Effective Date: 12/23/2008

This document constitutes issuance to:

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

Authorization (continued)

Permit Number: 07-00574
 Permit Description: Rumpke plans to modify the emission unit P901, to increase the capacity of of the landfill and allow for disposal of asbestos containing waste material regulated under 40 CFR 61 Subpart M.

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

Emissions Unit ID:	F002
Company Equipment ID:	Roads and Parking Areas
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F003
Company Equipment ID:	Composting Storage Piles
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Municipal Soild Waste (MSW) Landfill
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 2.a), Severability Clause
 - (2) Standard Term and Condition A. 3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A. 6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A. 9., Reporting Requirements
 - (5) Standard Term and Condition A. 10., Applicability
 - (6) Standard Term and Condition A. 11.b) through A. 11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A. 14., Public Disclosure
 - (8) Standard Term and Condition A. 15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A. 16., Fees
 - (10) Standard Term and Condition A. 17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Portsmouth City Health Dept., Air Pollution Unit. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Portsmouth City Health Dept., Air Pollution Unit every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

- a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.
- b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:



- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- d) The permittee shall submit progress reports to the Portsmouth City Health Dept., Air Pollution Unit concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Portsmouth City Health Dept., Air Pollution Unit. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be



submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.



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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

14. Public Disclosure

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

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

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

16. Fees

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



17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Portsmouth City Health Dept., Air Pollution Unit must be notified in writing of any transfer of this permit.

18. Risk Management Plans

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

19. Title IV Provisions

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

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. Subpart AAAA—National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

Source: 68 FR 2238, Jan. 16, 2003, unless otherwise noted.

[63.1930] What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

[63.1935] Am I subject to this subpart?

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.

(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

(b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:

(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.

(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.

[63.1940] What is the affected source of this subpart?



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

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

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

[63.1945] When do I have to comply with this subpart?

(a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.

(b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.

(c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.

(e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

[63.1947] When do I have to comply with this subpart if I own or operate a bioreactor?

You must comply with this subpart by the dates specified in §63.1945(a) or (b) of this subpart. If you own or operate a bioreactor located at a landfill that is not permanently closed as of January 16, 2003 and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must install and operate a collection and control system that meets the criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan according to the schedule specified in paragraph (a), (b), or (c) of this section.

(a) If your bioreactor is at a new affected source, then you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.



(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

(b) If your bioreactor is at an existing affected source, then you must install and begin operating the gas collection and control system for the bioreactor by January 17, 2006 or by the date your bioreactor is required to install a gas collection and control system under 40 CFR part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan or tribal plan that applies to your landfill, whichever is earlier.

(c) If your bioreactor is at an existing affected source and you do not initiate liquids addition to your bioreactor until later than January 17, 2006, then you must meet the requirements in paragraphs (c)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.

(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

[63.1950] When am I no longer required to comply with this subpart?

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.

[63.1952] When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?

If you own or operate a landfill that includes a bioreactor, you are no longer required to comply with the requirements of this subpart for the bioreactor provided you meet the conditions of either paragraphs (a) or (b).

(a) Your affected source meets the control system removal criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW or the bioreactor meets the criteria for a nonproductive area of the landfill in 40 CFR 60.759(a)(3)(ii) of part 60, subpart WWW.

(b) The bioreactor portion of the landfill is a closed landfill as defined in 40 CFR 60.751, subpart WWW, you have permanently ceased adding liquids to the bioreactor, and you have not added liquids to the bioreactor for at least 1 year. A closure report for the bioreactor must be submitted to the Administrator as provided in 40 CFR 60.757(d) of subpart WWW.

(c) Compliance with the bioreactor control removal provisions in this section constitutes compliance with 40 CFR part 60, subpart WWW or the Federal plan, whichever applies to your bioreactor.

Standards



[63.1955] What requirements must I meet?

(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

(d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.

(1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.

(2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A) (2).

General and Continuing Compliance Requirements

[63.1960] How is compliance determined?

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]



[63.1965] What is a deviation?

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

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

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

(c) A deviation occurs when a SSM plan is not developed or maintained on site.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

[63.1975] How do I calculate the 3-hour block average used to demonstrate compliance?

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

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

(b) Startups.

(c) Shutdowns.

(d) Malfunctions.

Notifications, Records, and Reports

[63.1980] What records and reports must I keep and submit?

(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

(c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.

(d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.



(e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.

(f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.

(1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.

(2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.

(3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

(g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.

(h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

Other Requirements and Information

[63.1985] Who enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.



(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in §63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

[63.1990] What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, 40 CFR part 60, subparts A, Cc, and WWW; 40 CFR part 62, subpart GGG, and subpart A of this part, and this section that follows:

Bioreactor means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

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

- (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

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

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

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

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



Tribal plan means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR part 60, subpart Cc.

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

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

Table 1 to Subpart AAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAA

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



	and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

C. Emissions Unit Terms and Conditions



1. F002, Roads 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Particulate Emissions (PE) shall not exceed 58.0 tons per year from the paved and unpaved roadways and parking areas.</p> <p>Particulate Matter with a diameter of 10 microns or less (PM10) shall not exceed 15.1 tons per year from the paved and unpaved roadways and parking areas.</p>
b.	OAC rule 3745-31-05(A)(3) Paved Roadways and Parking Areas	<p>Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see (2)c. through (2)g.).</p>
c.	OAC rule 3745-31-05(A)(3) Unpaved Roadways and Parking Areas	<p>Visible emissions of fugitive dust shall not exceed 5% opacity, as a 3-minute average.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see (2)c. through (2)g.).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)	See (2)h.
e.	OAC rule 3745-17-08(B)	See (2).i.

(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 access road-entrance to scales
- New exit road-after wheel wash
- Main parking Lot
- Employee parking
- Office and maintenance Lot
- Entrance to public MSW Drop Box
- Segment from MSW drop box to unpaved landfill perimeter

Note: portions of the roadways and parking areas listed above will be eliminated or removed after the completion of the landfill expansion and have to be changed in the Title V permit. These roads are: Main access road-entrance to scales, New exit road-after wheel wash, and Employee parking,

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

Unpaved Roadways:

- Landfill haul road
- Exit road-before wheel wash
- Employee & truck parking
- 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

* Note: portions of the roadways and parking areas listed above will be eliminated or removed after the completion of the landfill expansion and have to be changed in the Title V permit. These roads are the Landfill haul road, Exit road-before wheel wash, and Employee & Truck parking.



- 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).
- h. 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).
- i. 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).

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

(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.

(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 (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.

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.



f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) 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 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 modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

Visible emissions of fugitive dust from unpaved roadways 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 modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

c. Emission Limitation:

PE shall not exceed 58.0 tons per year.

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. above:

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

Where

E = emission factor (lb/VMT)

k = particle size multiplier = 0.082

sL = road surface silt loading, in g/m² = 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



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

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

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

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. above. The following equations should be used to calculate the emissions from each roadway:

$$PE \text{ (per roadway)} = E(\text{lb/VMT}) \times \text{vehicle miles traveled per year} \times 0.0005 \text{ ton/lb}$$

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

d. Emission Limitation:

PM₁₀ emissions shall not exceed 15.1 tons per year.

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. above:

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

Where

E = emission factor (lb/VMT)

k = particle size multiplier = 0.016

sL = road surface silt loading, in g/m² = 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



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 PM₁₀

b = 0.45 for PM₁₀

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. above. The following equations should be used to calculate the emissions from each roadway:

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

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

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	See b)(2)a.
b.	OAC rule 3745-17-08(B)	See b)(2)b.
c.	ORC 3704.03(T)(4)	See b)(2)c.

(2) Additional Terms and Conditions

a. 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 emissions unit is not located within areas identified in "Appendix A" of 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), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate and PM10 emissions from this air contaminant source since the uncontrolled potential to emit for particulate and PM10 emissions is less than ten tons per year

c) Operational Restrictions

(1) None.



State of Ohio Environmental Protection Agency
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Final Permit-to-Install
Permit Number: 07-00574
Facility ID: 0708000033
Effective Date: 12/23/2008

- d) Monitoring and/or Recordkeeping Requirements
 - (1) None.
- e) Reporting Requirements
 - (1) None.
- f) Testing Requirements
 - (1) None.
- 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) modification to add 4 NSPS enclosed combustors and 5 passive candlestick flares and increase the authorized maximum daily waste receipt (AMDWR) to 3,000 tons per day and 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 operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Fugitive (non stack) emissions shall not exceed the following :</p> <p>Non-methane organic (NMOC) emissions shall not exceed 488.14 tons per year.</p> <p>Methane (CH₄) emissions shall not exceed 75,712 tons per year.</p> <p>Volatile organic compounds (VOC) emissions shall not exceed 193.73 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 37.02 tons per year.</p> <p>Fluorides (excluding HF) emissions shall not exceed 22.84 tons per year.</p> <p>Hydrogen Sulfide (H₂S) emissions shall not exceed 11.58 tons per year.</p> <p>Fluorotrichloromethane (CFC-11) emissions shall not exceed 0.99 ton per year.</p> <p>Dichlorodifluoromethane (CFC-12) emissions shall not exceed 18.26 tons per year.</p> <p>Particulate Emissions (PE) shall not</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>exceed 0.17 ton per year.</p> <p>Particulate Emissions less than 10 microns (PM10) shall not exceed 0.08 ton per year.</p> <p>Hazardous Air Pollutants (HAP's) emissions shall not exceed 95.08 tons per year.</p> <p>See b)(2)a, b)(2)f. through b)(2)k., and b)(2)v.</p>
b.	OAC rule 3745-31-05(A)(3)	<p>Emissions from the 4 NSPS enclosed combustors shall not exceed the following:</p> <p>NMOC emissions shall not exceed 1.93 lbs per hour and 8.44 tons per year.</p> <p>CH4 emissions shall not exceed 299.01 lbs per hour and 1309.66 tons per year.</p> <p>Sulfur Dioxide (SO2) emissions shall not exceed 5.50 lbs per hour and 24.09 tons per year.</p> <p>Hydrogen Chloride (HCl) emissions shall not exceed 8.60 lbs per hour and 37.68 tons per year.</p> <p>Hydrogen Fluoride (HF) emissions shall not exceed 1.42 lbs per hour and 6.20 tons per year.</p> <p>Volatile Organic Compounds (VOC) emissions shall not exceed 0.77 lb per hour and 3.35 tons per year.</p> <p>*Hydrogen Sulfide emissions are assumed to be completely converted to SO2 emissions during combustion of landfill gas in the enclosed combustors.</p> <p>CFC-11 emissions shall not exceed 0.0039 lb per hour and 0.017 ton per year.</p> <p>CFC-12 emissions shall not exceed 0.072 lb per hour and 0.32 ton per year.</p> <p>See b)(2)b. and b)(2)r.</p>
c.	OAC rule 3745-31-05(A)(3)	<p>Emissions from the 5 candlestick flares shall not exceed the following:</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>CH4 emissions shall not exceed 25.0 lbs per hour and 109.45 tons per year.</p> <p>NMOC emissions shall not exceed 0.16 lb per hour and 0.71 ton per year.</p> <p>SO2 emissions shall not exceed 0.47 lb per hour and 2.05 tons per year.</p> <p>Emissions from the Non-NSPS Main Open flare shall not exceed the following:</p> <p>CH4 emissions shall not exceed 25.0 lbs per hour and 109.45 tons per year.</p> <p>NMOC emissions shall not exceed 0.16 lb per hour and 0.71 ton per year.</p> <p>SO2 emissions shall not exceed 0.47 lb per hour and 2.05 tons per year.</p> <p>See b)(2)b. and b)(2)r.</p>
d.	OAC rule 3745-31-10 through 20.	<p>Emissions from the 4 NSPS enclosed combustors shall not exceed the following:</p> <p>CO emissions shall not exceed 79.9 lbs per hour and 350.0 tons per year.</p> <p>Particulate matter and Particulate matter less than 10 microns (PE/PM10) emissions shall not exceed 6.10 lbs per hour and 26.71 tons per year.</p> <p>Nitrogen Oxide (NOx) emissions shall not exceed 21.78 lbs per hour and 95.39 tons per year.</p> <p>See b)(2)r., b)(2)s., and b)(2)z.</p> <p>Emissions from the 5 candlestick flares shall not exceed the following:</p> <p>CO emissions shall not exceed 22.5 lbs per hour and 98.55 tons per year.</p> <p>PE/PM10 emissions shall not exceed 0.51 lb per hour and 2.23 tons per year.</p> <p>NOx emissions shall not exceed 1.2 lbs per hour and 5.26 tons per year.</p> <p>See b)(2)r. and b)(2)s.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Emissions from the Non-NSPS Main Open flare shall not exceed the following:</p> <p>CO emissions shall not exceed 22.5 lbs per hour and 98.55 tons per year.</p> <p>PE/PM10 emissions shall not exceed 0.51 lb per hour and 2.23 tons per year.</p> <p>NOx emissions shall not exceed 1.2 lbs per hour and 5.26 tons per year.</p> <p>See b)(2)r. and b)(2)s.</p>
e.	40 CFR Part 60, Subpart WWW	<p>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.</p> <p>See b)(2)b. through b)(2)e. and b)(2)l. through b)(2)q.</p>
f.	40 CFR Part 60.18 (c)(1)	See b)(2)b. and b)(2)d.
g.	40 CFR Part 63, Subpart AAAA	See B.2.
h.	40 CFR Part 61, Subparts A and M and OAC Chapter 3745-20	<p>See b)(2)t. through b)(2)u. and b)(2)y.</p> <p>See b)(2)aa., c)(9), and c)(10).</p>

(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. the permittee 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. or ii. 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:

$$H_t = k \times (\text{the summation of } C_i H_i \text{ for } i=1 \text{ through } i=n)$$

where:

H_t = 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, 1.740×10^{-7} (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20 degrees C;

C_i = 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

H_i = 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, V_{max} , and less than 122 m/sec (400 ft/sec) are allowed; as determined by

$$\text{Log}_{10} (V_{max}) = (H_t + 28.8)/31.7$$

where:

V_{max} = 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:

$$V_{max} = (X_{h2} - K1) * K2$$

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:

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

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 permit to install 07-00574 and 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(f), 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 expandibility, 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:

$$Q_i = 2 \times k \times L_o \times M_i \times (e^{-k t_i}) \times (C_{nmoc}) \times (3.6 \times 10^{-9})$$

where:

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

k = methane generation rate constant, in year⁻¹



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

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

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

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

3.6×10^{-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

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 potentials 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 Enclosed Combustors, Non-NSPS Main Open Flare and Candlestick flares are particulate matter less than 10 micron in size (PM10).
- 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.
 - iv. 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 PM₁₀, 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.

- 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.
- (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).
- (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 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 value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
- (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.
- (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)c. 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.



- (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 open flare, enclosed combustor and/or gas recovery system at all times when the collected gas is routed to the system.
- (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.
- (8) When the calculated NMOC emission rate is greater than or equal to 50 megagrams per year (55.1 tpy) and whenever the enclosed combustor is in operation, the average combustion temperature shall be at least 1,400 degrees Fahrenheit, for any 3-hour block of time (or higher temperature needed to ensure a 98%, by weight, destruction of the NMOCs), measured by the temperature indicator.
- (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) Sans 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.

- (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
- (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 enclosed combustor and/or an energy recovery piece of equipment, as required above, or collect and sell the gas as fuel.
 - (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.
 - (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.
 - (14) The authorized maximum daily waste receipt (AMDWR) shall not exceed 3,000 tons excluding composting raw material and unprocessed and/or shredded tires.
- 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; and
 - c. the temperature of the landfill gas.
 - (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 4.3.1 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.
- e. The monitor used shall meet the requirements of 40 CFR 60.755.



- (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. a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes.
- (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, 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.
- (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:

$$Q_m = 2L_o \times R \times \{(e \text{ to the power of } -kc) - (e \text{ to the power of } -kt)\}$$

where:

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

L_o = 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:

$$Q_m = \text{summation of } 2kL_oM_i \times (e \text{ to the power of } -kti \text{ for } i=1 \text{ through } i=n)$$

where:



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

k = the methane generation rate constant, per year;

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

M_i = the mass of solid waste in the i th section, in megagrams; and

t_i = the age of the i th 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 sections 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.
- (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.
 - (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 Solid and Infectious Waste Management, and shall satisfy this permit condition.
 - (8) Except as otherwise provided in this section, the permittee shall perform inspections of the landfill operation areas in accordance with the following frequencies:



<u>landfill areas</u>	<u>minimum inspection frequency</u>
all landfill areas	once daily while in operation

- (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.
- (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.
- (11) The permittee shall maintain records of the following information:
- 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;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - 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.

- (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.
- 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.

- 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.
- (13) The permittee shall maintain daily records of the amount of landfill waste (i.e., excluding composting raw material and unprocessed and/or shredded tires) received.
 - (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 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 the enclosed combustor, when the emissions unit was in operation, was less than 1,400 degrees Fahrenheit; 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
- (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 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.
 - (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)(4).

- (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.
- (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.
- (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 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.
- (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.
- (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
- 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.

- (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.

e) Reporting Requirements

- (1) Any breakdown or malfunction of the landfill gas collection and control system resulting in the emission of raw landfill gas emissions to the atmosphere shall be reported to the Portsmouth Local Air Agency within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.
- (2) 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.

- (3) 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).
- (4) 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.
- (5) 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;
 - 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.

- (6) 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. and identification of each period during which the temperature in an enclosed combustor was less than 1,400 degrees Fahrenheit for any 3-hour blocks of time, and copy of the recorded chart for such period.

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

- (7) 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.
- (8) Then permittee shall notify the Portsmouth Local Air Agency in writing of any daily record which shows that the amount of landfill waste (i.e., excluding composting raw material and unprocessed and/or shredded tires) received exceeded 3,000 tons. 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.
- (9) 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.
- (10) 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.
- (11) 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.

- (12) 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.
- (13) 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.

- (14) The permittee shall submit, upon closure of the facility, a copy of the records of the asbestos waste disposal locations and quantities.
 - (15) 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.
 - (16) 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.
 - (17) The permittee shall also submit annual reports that specify the total NMOC, CO, PE, PM-10, NOx, SO2, HCl, HF, H2S, methane, 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.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) and b(2) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

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.

Applicable Compliance Method:

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. Emission Limitation:

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 4 NSPS enclosed combustors (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;
- NOx emissions shall not exceed 21.78 lbs/hr and 95.39 tons/yr;
- HCl emissions shall not exceed 8.60 lbs/hr and 37.68 tons/yr.

Applicable Compliance Methods:

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

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 4 NSPS enclosed combustors (stack emissions) shall not exceed the following:

Methane (CH4) 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;
PM10 emissions shall not exceed 6.10 lb/hr and 26.71 tons/yr;
SO2 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;
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 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 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;
PM10 emissions shall not exceed 0.08 ton/yr;
H₂S 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.
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 CH₄ 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 the Landfill Gas Emission Model (LandGEM), Version 3.02, May 2005.
- ii. CH₄ 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 Limitation:

Emissions from the 5 candlestick flares shall not exceed the following:

CO emissions shall not exceed 22.50 lbs/hr and 98.55 tpy.
CH₄ 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/PM₁₀ emissions shall not exceed 0.51 lbs/hr and 2.23 tpy.
SO₂ 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 Limitation:

Emissions from the Non-NSPS Main Open Flare shall not exceed the following:

CO emissions shall not exceed 22.50 lbs/hr and 98.55 tpy.
CH₄ 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 1.20 lbs/hr and 5.26 tpy
PE/PM₁₀ emissions shall not exceed 0.51 lbs/hr and 2.23 tpy.
SO₂ emissions shall not exceed 0.47 lbs/hr and 2.05 tpy.

Applicable Compliance Method:

If required, compliance with the hourly emission limitations shall be demonstrated through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 18, 25 or 25C, 10, 5, 7, and 6 for NMOC, CO, PE, NO_x, and SO₂, 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 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.

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, 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).

- (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).
- (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%
- (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 section f)(1)a.
- (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 enclosed combustors shall be conducted within 6 months after startup for the expansion area;
 - b. the emission testing shall be conducted to demonstrate compliance with the PE, NOX, 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;



NMOC , Methods 1 through 4 and 25, 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; and

- 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

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).

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.

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.

- (6) When the calculated NMOC rate is greater than or equal to 50 megagrams (55.1 tpy), the flow rate of landfill gas, Q_{lfg}, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of 40 CFR Part 60.
- (7) The average NMOC concentration, C_{nmoc}, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 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 C_{nmoc} as carbon to C_{nmoc} as hexane.
- (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



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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).

g) Miscellaneous Requirements

- (1) None.