



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

04/30/03

**CERTIFIED MAIL**

**RE: Final Title V Chapter 3745-77 permit**

07-08-00-0033

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

Dear John L Hattersley:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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 Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
236 East Town Street  
Room 300  
Columbus, Ohio 43215

If you have any questions, please contact Portsmouth Air Pollution Group.

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: Portsmouth Air Pollution Group  
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: <b>04/30/03</b>	Effective Date: <b>05/21/03</b>	Expiration Date: <b>05/21/08</b>
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This document constitutes issuance of a Title V permit for Facility ID: 07-08-00-0033 to:  
 Rumpke Sanitary Landfill - Brown County  
 9427 Beyers Road  
 Georgetown, OH 45121-9301

**Emissions Unit ID (Company ID)/Emissions Unit Activity Description**

F002 (Roads and Parking Areas) Paved and Unpaved Roads and Parking Areas	T001 (Leachate Aeration Tank - 11,000 gallon ) Leachate Aeration Tank - 11,000 gal. Previously Reported as Z002.	T002 (Leachate Aeration Tank - 11,000 gallon ) Leachate Aeration Tank - 11,000 gal. Previously Reported as Z002.
P901 (Existing MSW Landfill) Solid Waste Disposal Operations, Landfill Gas Generation and Control		

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Portsmouth Air Pollution Group  
 605 Washington Street, Third Floor  
 Portsmouth, OH 45662  
 (740) 353-5156

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones  
 Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. 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:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.

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

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

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

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

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

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

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii)

pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. 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.

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

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

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

## **2. Scheduled Maintenance/Malfunction Reporting**

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

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

## **3. 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.

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

## **4. Title IV Provisions**

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

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

## **5. Severability Clause**

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

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

## **6. General Requirements**

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

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. Fees**

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

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

**8. Marketable Permit Programs**

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

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

**9. Reasonably Anticipated Operating Scenarios**

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

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

**10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after

- promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
  - c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
  - d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.  
*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

#### **11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.  
*(Authority for term: OAC rule 3745-77-07(B))*

#### **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. 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.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

**14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

**15. Emergencies**

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

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

**16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

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

**17. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. State Only Enforceable Section**

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations,

operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., 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.)

**2. Records Retention Requirements**

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.

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

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

**5. Permit Transfers**

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

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

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., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

1. [63.1930]  
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 Section 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.
2. [63.1935]  
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 (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to Section 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 Section 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 m<sup>3</sup> and that is not permanently closed as of January 16, 2003.
3. [63.1940]  
(a) An affected source of this subpart is a MSW landfill, as defined in Section 63.1990, that meets the criteria in Section 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.

**A. State and Federally Enforcable Section (continued)**

**4. [63.1945]**

(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 Sections 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 Sections 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 Section 63.1935(a)(3), you must comply with the requirements of Sections 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 Section 63.1935(a)(3), you must comply with the requirements in Sections 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.

**5. [63.1947]**

You must comply with this subpart by the dates specified in Section 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 m<sup>3</sup>, 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 Section 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.

**A. State and Federally Enforcable Section (continued)**

(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 Section 63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

**6. [63.1950]**

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.

**7. [63.1952]**

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.

**8. [63.1955]**

(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 Sections 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, record keeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR Part 60 Subpart WWW 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 Section 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.

**A. State and Federally Enforcable Section (continued)**

(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 m<sup>3</sup>, 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 Sections 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).

**9. [63.1960]**

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

**10. [63.1965]**

A deviation is defined in Section 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, implemented, or maintained on site.

**11. [63.1975]**

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

- (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
- (b) Startups.
- (c) Shutdowns.
- (d) Malfunctions.

**A. State and Federally Enforcable Section (continued)**

**12. [63.1980]**

(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 Section 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 Section 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 Section 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 Section 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 Sections 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 Section 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.

**A. State and Federally Enforcable Section (continued)**

**13. [63.1985]**

(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 Section 63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

**14. [63.1990]**

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

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 Section 257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or 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.

**A. State and Federally Enforcable Section (continued)**

- 15.** As stated in Sections 63.1955 and 63.1980, you must meet each requirement in the following table that applies to you.

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

Part 63 Citation	Description	Explanation
63.1(a) .....	Applicability:	Affected sources are already subject
.	of NESHAP in this part.	(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	Affected sources are already subject to
.		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	Affected sources are already subject to
.	nonopacity emission	the provisions of paragraphs (f)(1)and
.	standards	(2)(i) through the same provisions
.		Under 40 CFR Part 60, Subpart A.
63.10(b)(2)(i)-(b)(2)(v)....	General record keeping	
.	requirements.	

**A. State and Federally Enforceable Section (continued)**

- 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.
- 

**B. State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

Z003 - 1,100-gallon waste oil storage tank;  
Z004 - 12,000-gallon diesel fuel storage tank;  
Z005 - 10,000-gallon diesel fuel storage tank;  
Z006 - cold cleaners;  
Z007 - miscellaneous painting of containers; and  
Z008 - daily cover material handling/storage operation.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

2. The permittee shall not cause or allow any open burning at this location.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Roads and Parking Areas (F002)  
**Activity Description:** Paved and Unpaved Roads and Parking Areas

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paved roadways and parking areas (see section A.1.2.a)	OAC rule 3745-31-05(A)(3) (PTI 07-00456)	no visible particulate emissions except for one minute during any 60-minute observation period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust
unpaved roadways and parking areas (see section A.1.2.b)		no visible particulate emissions except for three minutes during any 60-minute observation period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust  See A.1.2.a through A.1.2.i below.  90.81 tpy of particulate emissions
	OAC rule 3745-17-08(B) and OAC rule 3745-17-07(B)	exempt (non - Appendix A area)

## 2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:

paved roadways:

main access road - entrance to scales

new exit road - after wheel wash

paved parking areas:

employee parking

- 2.b** The unpaved roadways and parking areas 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

unpaved parking areas:

employee & truck parking

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water and sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with watering at sufficient treatment frequencies, surface improvements, and speed control as control measures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.g** 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.
- 2.h** 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.

**2. Additional Terms and Conditions (continued)**

- 2.i 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.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:
  - paved roadways and parking areas      minimum inspection frequency
  - all      daily
  - unpaved roadways and parking areas      minimum inspection frequency
  - all      daily
- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within the 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 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 section A.III.3.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

**IV. Reporting Requirements**

- 1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection that was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
- 2. The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.

## V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

no visible particulate emissions except for one minute during any 60-minute observation period, for paved roadways and parking areas

no visible particulate emissions except for three minutes during any 60-minute observation period, for unpaved roadways and parking areas

Applicable Compliance Method:

Compliance with the emission limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 (Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

1.b Emission Limitation:

90.81 tpy of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by employing the emission factor (pounds per vehicle mile traveled) derived from the equations in AP-42, sections 13.2.1 and 13.2.2 (equation 1, option 1, for paved roads and equation 2 for unpaved roads), Draft 10/01 (unpaved roadways), 10/02 (paved roadways), and applying a control factor of 75% for the application of water, surface improvements, and speed control to unpaved surfaces and 75% for the application of water and broom sweeping to paved surfaces (RACM Table 2.1.1-3).

## VI. Miscellaneous Requirements

None

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Existing MSW Landfill (P901)

**Activity Description:** Solid Waste Disposal Operations, Landfill Gas Generation and Control

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
existing MSW landfill equipped with a gas collection and control system (flare)	OAC rule 3745-31-05(A)(3) (PTI 07-00456)	0.51 lb/hr of particulates from the open flare
		2.23 tpy of particulates from the open flare
		0.47 lb/hr of sulfur dioxide (SO <sub>2</sub> ) from the open flare
		2.05 tpy of SO <sub>2</sub> from the open flare
		1.2 lbs/hr of nitrogen oxides (NO <sub>x</sub> ) from the open flare
		5.26 tpy of NO <sub>x</sub> from the open flare
		22.5 lbs/hr of carbon monoxide (CO) from the open flare
		98.55 tpy of CO from the open flare
		0.06 lb/hr of volatile organic compounds (VOC) from the open flare
		0.28 tpy of VOC from the open flare
		0.16 lb/hr of non-methane organic compounds (NMOC) from the open flare
		0.71 tpy of NMOC from the open flare
		106.91 tpy of methane (CH <sub>4</sub> ) from the open flare
		0.14 tpy fugitive particulate emissions

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 60, Subpart WWW	See A.1.2.a , A.1.2.b, and A.1.2.f through A.1.2.k below. When the calculated NMOC emission rate is greater than 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.
	40 CFR Part 60.18(c)(1)	See A.1.2.c through A.1.2.e below.
	40 CFR Part 63, Subpart AAAA	See A.1.2.d below.
		See section A.1.2.l.

**2. Additional Terms and Conditions**

- 2.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 A.1.2.g and A.1.2.i below.
- 2.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).
- 2.c** When the calculated NMOC emission rate is greater than 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.

**2. Additional Terms and Conditions (continued)**

**2.d** When the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), the collected gas shall be vented to an open flare designed and operated as follows:

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

ii. The flare shall be operated with a flame present at all times.

iii. The permittee shall comply with either the requirements in paragraphs (1) and (2) or the requirements in paragraph (3) or the requirements in paragraph (4):

(1) The 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 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 off gas is based on combustion at 25 degrees C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees C;

$k$  = constant,  $1.740 \times 10^{-7}$  (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; 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 (incorporated by reference as specified in 40 CFR Part 60.17) if published values are not available or cannot be calculated.

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

(a) steam-assisted and nonassisted 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

(b) steam-assisted and nonassisted 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

$H_t$  = the net heating value as determined in section A.I.2.d.iii.(1) above.

(3) The 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,  $V_{max}$ , as determined by the following equation:

**2. Additional Terms and Conditions (continued)**

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

where:

$V_{max}$  = the maximum permitted velocity, in m/sec;

$K1$  = constant, 6.0 volume-percent hydrogen;

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

$X_{h2}$  = the volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77.

(4) An air-assisted flare shall be designed for and operated with an exit velocity of less than the velocity,  $V_{max}$ , as determined by the following equation:

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

where:

$V_{max}$  = the maximum permitted velocity, m/sec;

8.706 = constant;

0.7084 = constant; and

$Ht$  = the net heating value as determined in section A.1.2.d.iii.(1) above.

**2.e** 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.

**2.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.

**2.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.

**2.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.

**2.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.

## **2. Additional Terms and Conditions (continued)**

- 2.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.
- 2.k** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate to satisfy the requirements permit to install 07-00456 and OAC rule 3745-31-05.
- 2.l** If the annual recalculated NMOC emission rate is equal to or greater than 50 megagrams (55 tons) per year, 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. If the permittee is required to install a collection and control system, it shall be necessary to modify this permit.

## **II. Operational Restrictions**

- 1.** When the calculated NMOC emission rate is greater than 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 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 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 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 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 A.I.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 50 megagrams per year (55.1 tpy), the permittee shall operate the flare at all times when the collected gas is routed to the system.
- 7.** When the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), a pilot flame shall be maintained at all times in the flare's pilot light burner.
- 8.** The permittee shall not accept or dispose of any friable asbestos or friable asbestos-containing materials. The receipt of any friable asbestos or friable asbestos-containing waste without proper approval of the Ohio EPA is a violation of 40 CFR Part 61, Subpart M and OAC rule 3745-20-06.

### III. Monitoring and/or Record Keeping Requirements

1. When the calculated NMOC emission rate is greater than 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 50 megagrams per year (55.1 tpy), the permittee shall monitor surface concentrations of methane on a quarterly basis as follows:
  - a. The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meters intervals (or a site-specific established spacing) for each collection area using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d).

In accordance with 40 CFR 60.753(d), the permittee shall also conduct surface testing where visible observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

- 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 40 CFR Part 60, Appendix A, Method 21, section 4.3.1, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
- d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements listed in section A.II.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 remonitoring 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 installation may be submitted to the Ohio EPA 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 parts per million 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.

**III. Monitoring and/or Record Keeping Requirements (continued)**

3. When the calculated NMOC emission rate is greater than 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; 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 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 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  $e \text{ to the power of } -kc = 1$ ).

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

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

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. Monitoring and/or Record Keeping Requirements (continued)**

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 A.III.5.i and A.III.5.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 section A.III.5.i or A.III.5.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 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 flare pilot flame or flare flame monitoring and records of all periods of operations during which the flare pilot flame or flare flame was absent.

6. When the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), the permittee shall properly install, operate, and maintain a device to continuously monitor the flare pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall record the following information each day:

a. all periods during which there was no pilot flame; and

b. the downtime for the flare and monitoring equipment when the collection and control system is in operation.

7. When the calculated NMOC emission rate is greater than 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.

8. 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.

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

landfill areas	minimum inspection frequency
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all landfill areas	daily
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10. 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.

### III. Monitoring and/or Record Keeping Requirements (continued)

11. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section A.III.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.

### IV. 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 appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or 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 50 megagrams per year (55.1 tpy), the permittee shall submit an equipment removal report to the appropriate Ohio EPA District Office or 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.

#### **IV. Reporting Requirements (continued)**

5. The permittee shall submit deviation 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 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 50 megagrams per year (55.1 tpy), any record which indicates that the nitrogen or oxygen concentration in the landfill gas was greater than 20% or 5%, respectively;
  - e. when the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), any record which indicates that the temperature of the landfill gas was greater than 55 degrees Celsius;
  - f. when the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), any record which indicates that the surface concentration of methane was greater than 500 parts per million above background, if applicable;
  - g. when the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), all periods during which the flare pilot flame was not functioning properly (the reports shall include the date, time, and duration of each such period); and
  - h. when the calculated NMOC emission rate is greater than 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.
- The deviation reports shall be submitted in accordance with the reporting requirements specified in General Term and Condition A.1.c of this permit.
6. When the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), the permittee shall submit 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).

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

#### **IV. Reporting Requirements (continued)**

7. When the calculated NMOC emission rate is greater than 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. The permittee shall submit the following notifications:
  - a. Initial Notification: shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR Part 63.9 (b)(2).
  - b. Notification of Compliance Status: shall be submitted by the date specified in the standard.

#### **V. Testing Requirements**

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

When the calculated NMOC emission rate is greater than 50 megagrams per year (55.1 tpy), there shall be no visible particulate emissions from the 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.

**1.b** Emission Limitation:

Visible particulate fugitive emissions shall not exceed 20% opacity as a 3-minute average for cell load-in and wind erosion.

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 as set forth in "Appendix A on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

**V. Testing Requirements (continued)**

**1.c** Emission Limitation:

0.16 lb/hr of NMOC from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission estimates calculated using USEPA's Landfill Air Emission Estimate Model version 2.01 and AP-42 emission factors and equations from section 2.4. Equations 3 and 4 of AP-42, Page 2.4-5, dated November, 1998, with a flare destruction efficiency of 98%, shall be used to calculate emissions.

**1.d** Emission Limitation:

0.71 tpy of NMOC from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly NMOC emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the NMOC emission limitation, in lb/hr, is maintained.

**1.e** Emission Limitation:

106.91 tpy of methane from the open flare

Applicable Compliance Method:

Annual emissions shall be calculated using USEPA's Landfill Air Emission Estimate Model, version 2.01, with a flare destruction efficiency of 98%.

**1.f** Emission Limitation:

22.5 lbs/hr of CO from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based upon a flare emission factor of 750 lbs of CO/mm dscfm of methane (AP-42, Table 2.4-5, Municipal Solid Waste Landfills, dated November, 1998), and a maximum flow rate of 1000 dscfm of landfill gas.

**1.g** Emission Limitation:

98.55 tpy of CO from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly CO emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the CO emission limitation, in lbs/hr, is maintained.

**1.h** Emission Limitation:

1.2 lbs/hr NOx from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based upon a flare emission factor of 40 lbs of NOx/mm dscfm of methane (AP-42, Table 2.4-5, Municipal Solid Waste Landfills, dated November, 1998), and a maximum flow rate of 1000 dscfm of landfill gas.

**V. Testing Requirements (continued)**

**1.i** Emission Limitation:

5.26 tpy of NO<sub>x</sub> from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly NO<sub>x</sub> emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the NO<sub>x</sub> emission limitation, in lbs/hr, is maintained.

**1.j** Emission Limitation:

0.47 lb/hr of SO<sub>2</sub> from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based upon a value of 46.9 ppmv for reduced sulfur and equations (3), (4), and (7) from AP-42, Chapter 2.4, Municipal Solid Waste Landfills, dated November, 1998.

**1.k** Emission Limitation:

2.05 tpy of SO<sub>2</sub> from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly SO<sub>2</sub> emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the SO<sub>2</sub> emission limitation, in lb/hr, is maintained.

**1.l** Emission Limitation:

0.51 lb/hr of particulate emissions from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based on a flare emission factor of 17 lbs of particulates/mm dscfm of methane (AP-42, Table 2.4-5, Municipal Solid Waste Landfills, dated November, 1998) and a maximum flow rate of 1000 dscfm of landfill gas.

**1.m** Emission Limitation:

2.23 tpy of particulate emissions from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly particulate emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the particulate emission limitation, in lb/hr, is maintained.

**1.n** Emission Limitation:

0.14 tpy of particulate emissions which are fugitive landfill emissions

Applicable Compliance Method:

Compliance shall be demonstrated based on emission factors from AP-42, Chapter 13.2.4-3, Aggregate Handling and Storage Piles, dated January, 1995.

## V. Testing Requirements (continued)

**1.o** Emission Limitation:

0.06 lb/hr of VOC from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated based upon emission estimates calculated using USEPA's Landfill Air Emission Estimate Model version 2.01 and AP-42 emission factors and equations from section 2.4. Equations 3 and 4 of AP-42, Page 2.4-5, based on a 39% by weight default VOC content, AP-42, Table 2.4-2, dated November, 1998, with a flare destruction efficiency of 98%, shall be used to calculate emissions.

**1.p** Emission Limitation:

0.28 tpy of VOC from the open flare

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the allowable hourly VOC emission limitation by 8760 hours per year, and then dividing by 2000 lbs/ton. Compliance with the tpy emission limitation shall be assumed provided compliance with the VOC emission limitation, in lb/hr, is maintained.

- 2.** When the calculated NMOC emission rate is greater than 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 50 megagrams per year (55.1 tpy), the oxygen level shall be determined by an oxygen meter using Method 3A 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;
  - b. a data recorder is not required;
  - c. only two calibration gases are required, a zero and span, and ambient air may be used as the span;
  - d. a calibration error check is not required; and
  - e. the allowable sample bias, zero drift, and calibration drift are plus or minus 10%.
- 4.** When the calculated NMOC rate is greater than 50 megagrams (55.1 tpy), the permittee shall conduct or have conducted, within 90 days after the installation of the collection and control system, an initial performance test to demonstrate that the 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 flare and the actual exit velocity of the flare shall be determined in accordance with the procedures and methods specified in 40 CFR Part 60.18. The visible emission evaluation shall be conducted in accordance with the procedures specified in section A.V.1.a.
- 5.** After the installation of a collection and control system in compliance with 40 CFR Part 60.755, the permittee shall calculate the NMOC emission rate for the purpose of determining when the system can be removed as provided in 40 CFR Part 60.752(b)(2)(v) in accordance with the equation and procedures specified in 40 CFR Part 60.754(b), (b)(1), and (b)(2). The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Ohio EPA as provided in 40 CFR Part 60.752(b)(2)(i)(B).

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
existing MSW landfill equipped with a gas collection and control system (flare)		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

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

Pollutant: Hydrogen Chloride  
 TLV (ug/m3): 5,497  
 Maximum Hourly Emission Rate (lb/hr): 0.74  
 Predicted 1-Hour Maximum Ground-Level Concentration 0.72  
 MAGLC (ug/m3): 130.9

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

**III. Monitoring and/or Record Keeping Requirements (continued)**

3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Leachate Aeration Tank - 11,000 gallon (T001)

**Activity Description:** Leachate Aeration Tank - 11,000 gal. Previously Reported as Z002.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
11,000-gallon leachate aeration tank	OAC rule 3745-31-05(A)(3) (PTI 07-00491)	Volatile organic compound (VOC) emissions shall not exceed 0.2 tpy.  Ammonia (NH3) emissions shall not exceed 5.5 tpy.  The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.
	40 CFR Part 60, Subpart Kb	See A.I.2.a below.

**2. Additional Terms and Conditions**

- 2.a In accordance with 40 CFR 60.110b(b), storage vessels with design capacity less than 75 cubic meters (19,813 gallons) are exempt from the General Provisions (40 CFR Part 60, Subpart A) and from the provisions of 40 CFR Part 60, Subpart Kb, except as specified in 40 CFR 60.116(a) & (b) and A.III.1 below.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

0.2 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by a one time calculation multiplying the maximum vessel throughput of 5,616,000 gallons/year times the maximum concentration of VOC of 0.00006 pound/gallon, and then dividing by 2000 pounds/ton. This calculation assumes 100% of the VOC contained in the leachate is released.

**1.b** Emission Limitation:

5.5 tpy of NH<sub>3</sub>

Applicable Compliance Method:

Compliance shall be demonstrated by a one time calculation multiplying the maximum vessel throughput of 5,616,000 gallons/year times the maximum concentration of NH<sub>3</sub> of 0.00167 pound/gallon, and then dividing by 2000 pounds/ton. The calculation assumes 100% of the NH<sub>3</sub> contained in the leachate is released.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
11,000-gallon leachate aeration tank		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit (T001) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m3): 17.41

Maximum Hourly Emission Rate (lbs/hr): 0.625 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 412.97

MAGLC (ug/m3): 414.52

### **III. Monitoring and/or Record Keeping Requirements (continued)**

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

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Leachate Aeration Tank - 11,000 gallon (T002)

**Activity Description:** Leachate Aeration Tank - 11,000 gal. Previously Reported as Z002.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
11,000-gallon leachate aeration tank	OAC rule 3745-31-05(A)(3) (PTI 07-00491)	Volatile organic compound (VOC) emissions shall not exceed 0.2 tpy.  Ammonia (NH3) emissions shall not exceed 5.5 tpy.  The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.
	40 CFR Part 60, Subpart Kb	See A.I.2.a below.

**2. Additional Terms and Conditions**

- 2.a In accordance with 40 CFR 60.110b(b), storage vessels with design capacity less than 75 cubic meters (19,813 gallons) are exempt from the General Provisions (40 CFR Part 60, Subpart A) and from the provisions of 40 CFR Part 60, Subpart Kb, except as specified in 40 CFR 60.116(a) & (b) and A.III.1 below.

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

**V. Testing Requirements (continued)**

**1.a** Emission Limitation:

0.2 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by a one time calculation multiplying the maximum vessel throughput of 5,616,000 gallons/year times the maximum concentration of VOC of 0.00006 pound/gallon, and then dividing by 2000 pounds/ton. This calculation assumes 100% of the VOC contained in the leachate is released.

**1.b** Emission Limitation:

5.5 tpy of NH<sub>3</sub>

Applicable Compliance Method:

Compliance shall be demonstrated by a one time calculation multiplying the maximum vessel throughput of 5,616,000 gallons/year times the maximum concentration of NH<sub>3</sub> of 0.00167 pound/gallon, and then dividing by 2000 pounds/ton. The calculation assumes 100% of the NH<sub>3</sub> contained in the leachate is released.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
11,000-gallon leachate aeration tank		

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permit to install for this emissions unit (T002) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ammonia

TLV (mg/m3): 17.41

Maximum Hourly Emission Rate (lbs/hr): 0.625 lb/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 412.97

MAGLC (ug/m3): 414.52

### **III. Monitoring and/or Record Keeping Requirements (continued)**

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

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### **IV. Reporting Requirements**

**None**

### **V. Testing Requirements**

**None**

### **VI. Miscellaneous Requirements**

**None**

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