OhioEPA

State of Ohio Environmental Protection Agency

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

05/22/02

**RE: Proposed Title V Chapter 3745-77 Permit**
**02-43-04-1202**
**Lake County Recycling and Disposal Facility**

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Lake County Recycling and Disposal Facility, has been created in Ohio EPA's State Air Resources System (STARS) on 05/22/02, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

# PROPOSED TITLE V PERMIT

| Issue Date: 05/22/02 | Effective Date: To be entered upon final issuance | Expiration Date: To be entered upon final issuance |
|---|---|---|

This document constitutes issuance of a Title V permit for Facility ID: 02-43-04-1202 to:
Lake County Recycling and Disposal Facility
7166 Brooklane Road
Kirtland, OH 44026

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

F001 (Landfill Operations)
Waste storage and degradation

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:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

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. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, 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 taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly 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 of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. 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. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

iii. Written reports, which 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. 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 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, i.e., upset condition, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upset conditions.

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; and

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 (a) 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, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. 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.** There are no storage piles or roadways at this facility and this permit does not authorize the permittee to establish and maintain storage piles at this facility. Furthermore, access roads, used for the purpose of monitoring gas extraction wells, the flare, and monitoring wells, are the only permissible roadways at this facility.

## B. State Only Enforceable Section

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

Z001 - 20,000-gallon Leachate Storage Tank

Z002 - 20,000-gallon Leachate Storage Tank

Z003 - 8,000-gallon Leachate Storage Tank

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.

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Landfill Operations (F001)

**Activity Description:** Waste storage and degradation

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| closed municipal solid waste (MSW) landfill, landfill gas (LFG) is controlled with a flare | OAC Chapter 3745-76 | See A.I.2.a through e below. |

**2. Additional Terms and Conditions**

**2.a** OAC Chapter 3745-76 was promulgated by Ohio EPA and became effective on January 31, 1998; however, it is not yet part of the federally approved State Implementation Plan (SIP). Ohio EPA has received confirmation from USEPA concerning the acceptability of this rule, and the Chapter should be considered federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the Chapter as a revision to the Ohio SIP for ozone.

**2.b** The active collection system shall satisfy the following requirements, as specified in OAC rule 3745-76-07(B)(2)(b):

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.c** 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 net heating value of the gas being combusted in the nonassisted flare shall be 7.45 Mj/scm (200 Btu/scf) or greater.

iv. The exit velocity for a nonassisted flare shall be less than 18.3 m/sec (60 ft/sec), except under the following condition:

a. the exit velocity may be equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000 Btu/scf); or

b. the exit velocity, as determined by A.V.6, is less than Vmax, as determined by A.V.7, and is less than 122 m/sec (400 ft/sec).

**2.d** The collection and control system may be capped or removed provided that all of the following conditions, as specified in OAC rule 3745-76-07(B)(2)(e), are met:

i. the landfill shall be a closed landfill as defined in OAC rule 3745-76-01 [closure report shall be submitted to the Director as provided in OAC rule 3745-76-12(D)];

ii. the collection and control system shall have been in operation a minimum of 15 years from when the first well was installed and put into operation; and

iii. following the procedures specified in paragraph (B) of OAC rule 3745-76-09, the calculated NMOC gas produced by the landfill shall be less than fifty megagrams per year on three successive test dates. The test dates shall be no less than ninety days apart, and no more than one hundred eighty days apart.

**2.e** The flare shall be steam-assisted, air-assisted, or nonassisted.

## II. Operational Restrictions

**1.** 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 placed for 5 years or more if active, or for 2 years or more if closed or at final grade.

**2.** The permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions, unless otherwise specified in the Design Plan approved by the Ohio EPA:

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.)

c. A decommissioned well. (A well may experience a static positive pressure after shutdown to accommodate for declining flows.

d. During maintenance or gas system expansion.

**3.** 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.

## II. Operational Restrictions (continued)

**4.** 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.** The permittee shall operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with A.I.2.b. 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.** The permittee shall operate the flare at all times when the collected gas is routed to the system.

## III. Monitoring and/or Record Keeping Requirements

**1.** For the active gas collection system, the permittee shall install a sampling port and a thermometer, other temperature monitoring device, or an access port 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.** The permittee shall monitor surface concentrations of methane on a quarterly basis as follows:

a. Monitor surface concentrations of methane along the entire perimeter of the collection area and along a serpentine pattern spaced 60 meters apart for each collection area.

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

c. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. The instrumentation specifications and procedures shall be in compliance with OAC rule 3745-76-10(D).

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 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 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 the location is required until the next quartlerly 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.** 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.** 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.** The permittee shall maintain the following information for the life of the control equipment as measured during the initial performance test or compliance demonstration:

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

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

Qm = 2 x Lo x R x {(e to the power -kc) - (e to the power -kt)}
where:
Qm = maximum expected gas generation flow rate, cubic meters per year
Lo = methane generation potential, cubic meters per megagram solid waste
R = average annual acceptance rate, megagrams per year
k = methane generation rate constant, per year
t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years.
c = time since closure, years (for an active landfill c = 0 and (e to the power -kc) = 1)

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

Qm = Summation of 2 x k x Lo x Mi x (e to the power -kti for i = 1 through i = n)
where:

Qm = maximum expected gas generation flow rate, cubic meters per year
k = methane generation rate constant, per year
Lo = methane generation potential, cubic meters per megagram solid waste
Mi = mass of solid waste in the i th section, megagrams
ti = age of the i th section, 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 paragraphs A.III.5.i. and ii. (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 shall be determined using the procedures specified in OAC rule 3745-76-14(A)(1).

c. The flare type (i.e. steam-assisted, air-assisted, or non-assisted).

d. All visible emission readings.

e. Heat content determinations of the gas.

f. Flow rate or bypass flow rate measurements.

g. Exit velocity determinations made during the performance test as specified in OAC rule 3745-76-15.

h. 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 is absent.

**6.** The permittee shall properly operate and maintain a device to continuously monitor the flare pilot flame or main flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and miantained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record each day the downtime for the flare and monitoring equipment when the collection and control system are in operation.

**7.** 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 be also required by the Ohio EPA, Division of Solid and Infectious Waste Management, and shall satisfy this permit condition.

**9.** The permittee shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 60-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.

**10.** The permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures of OAC rule 3745-76-10 (D). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 parts per million or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

## 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 Northeast District Office of the Ohio EPA 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.** No additional wastes may be placed into the landfill without filing a notification of modification as descibed in 40 CFR Part 60.7(a)(4).

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit an equipment removal report to the Northeast District Office of the Ohio EPA 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in OAC rule 3745-76-12(E). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in OAC rule 3745-76-07(B)(2)(e) have been met.

**4.** The permittee shall submit deviation reports that identify any of the following occurrences:

a. any record which indicates that the nitrogen or oxygen concentration in the landfill gas was greater than 20 percent or 5 percent, respectively; unless otherwise specified in the design plan approved by the Ohio EPA;

b. any record which indicates that the gauge pressure in the gas collection header at each individual well was positive;

c. any record which indicates that the temperature of the landfill gas was greater than 55 degrees Celsius;

d. any record which indicates that the surface concentration of methane was greater than 500 parts per million above background;

e. all periods during which the flare pilot flame or main flame were not functioning properly (the reports shall include the date, time, and duration of each such period; and

f. 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 of the General Terms and Conditions of this permit. If monitoring demonstrates that the operational requirement in paragraph (B), (C) or (D) [for wellhead pressure, wellhead temperature, and surface methane concentration, respectively] of OAC rule 3745-76-08 is not met, corrective actions shall be taken as specified in paragraphs (A)(3) to (A)(5) of OAC rule 3745-76-10 or paragraph (C) of OAC rule 3745-76-10. If the corrective actions are taken as specified in OAC rule 3745-76-10, the monitored exceedance is not a violation of the operational requirement in OAC rule 3745-76-08.

**5.** 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;

b. any record indicating the date of installation and the location of each well or collection system expansion added pursuant to OAC rules 3745-76-10(A)(3), (B), and (C)(4); and

c. the descriptions and durations of all periods when the control device was not operating for a period exceeding one hour and the length of time the control device was not operating.

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

## IV. Reporting Requirements (continued)

**6.** The permittee shall submit the following information with the initial performance test report required pursuant to OAC rule 3745-76-07(B)(2)(c)(ii):

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 rates 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; and

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.

## V. Testing Requirements

**1.** Emission Limitation: No visible emission 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 through visible emission observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 22, and procedures specified in OAC rule 3745-76-15(D)(1).

**2.** 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 OAC rule 3745-76-07(B)(2)(a).

**3.** 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 OAC rule 3745-76-07(B)(2)(a), 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.** The permittee has conducted on March 14, 2001 an initial performance test to demonstrate that the flare can operate in conformance with the requirements specified in OAC rule 3745-76-15. The net heating value of 16.46 megajoules per statdard cubic meter of the gas being combusted in the flare and the actual flare exit velocity of 4.33 meters per second was determined in accordance with the procedures and methods specified in OAC rule 3745-76-15(D)(3) and OAC rule 3745-76-15(D)(4), respectively. The visible emission evaluation shall be conducted in accordance with the procedures specified in Section A.V.1.

**5.** After the installation of a collection and control system in compliance with OAC rule 3745-76-10, the permittee shall calculate the NMOC emission rate for the purposes of determining when the system can be removed as provided in OAC rule 3745-76-07(B)(2)(e) in accordance with the equation and procedures specified in OAC rule 3745-76-09(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 OAC rule 3745-76-07(B)(2)(a)(ii).

## V. Testing Requirements (continued)

**6.** The maximum permitted velocity, Vmax, for flares shall be determined by the following equation.

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

Where:

Vmax = maximum permitted velocity, which is 26.8 m/sec.
28.8 = constant.
31.7 = constant.
Ht = the net heating value, which is 16.46 MJ/scm as determined by ASTM Methods D-1946 and D-3588.

## VI. Miscellaneous Requirements

**1.** Authority to Enter

Pursuant to the authority in OAC rule 3745-77-07(C)(2) or ORC 3704.03(L), any representative of the Director may, upon presentation of proper identification, enter at any reasonable time upon any portion of the property where this landfill is located, including any improvements thereon, to make inspections, take samples, conduct tests and examine records or reports pertaining to any emissions of air contaminants and any monitoring equipment, emissions control equipment or methods. No operator or agent of this landfill shall act in any manner to refuse, hinder, or thwart this legal right of entry.

## 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.

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| closed municipal solid waste (MSW) landfill, landfill gas (LFG) is controlled with a flare | None | None |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

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

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

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