



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

05/31/05

CERTIFIED MAIL

**RE: Preliminary Proposed Title V
Chapter 3745-77 permit**

16-77-01-0976
Akron Regional Landfill Inc
Tim K. Haaf
851 Robison Road East
Erie, PA 16509-5339

Dear Tim K. Haaf:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on (not issued). The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

**Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215**

and

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Sincerely,

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

cc: Akron Air Pollution Control
File, DAPC PMU



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 05/31/05	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: 16-77-01-0976 to:
 Akron Regional Landfill Inc
 1585 Hardy Rd
 Akron, OH 44313

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

P902 (Landfill Operations) Emissions the landfill gas collection and control system. All closure construction activities have been	completed. The facility closure certification was issued by the Ohio EPA on December 30, 2004.
---	--

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 3745-77-04(A) 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:

Akron Air Pollution Control
 146 South High Street, Room 904
 Akron, OH 44308
 (330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Joseph P. Koncelik
 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, i.e., in Section A.III of Part III of this Title V permit, 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. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

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

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

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

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

- ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

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

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

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

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

See B.6 below if no deviations occurred during the quarter.

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

- iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

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

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

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

- 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))

- v. 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))

2. **Scheduled Maintenance**

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

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

3. **Risk Management Plans**

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

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

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. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

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))

21. Permanent Shutdown of an Emissions Unit

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

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

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

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

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

- a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;
- b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

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

F002 - roadways and parking areas (PTI 16-02162); and
T001 - leachate storage tank (PTI 16-02128).

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. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

(Authority for term: OAC rule 3745-77-07(A)(13))

B. State Only Enforceable Section

1. The permittee shall not cause or allow any open burning in violation of OAC Chapter 3745-19 at this facility.
2. The permittee shall not initiate or allow any salvage operation to be conducted at this location without prior approval of the Ohio EPA. This excludes recycling or energy recovery, unless Ohio EPA approval is needed.
3. The permittee shall operate this facility in such a manner that it does not become offensive or objectionable to the public in violation of OAC rule 3745-15-07. If an odor resulting from construction activities is detected at the property line, the permittee shall institute all available mitigation measures. Odor mitigation measures deemed appropriate by the Director to protect the comfort, repose, health or safety of the public shall be implemented upon request.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Landfill Operations (P902)

Activity Description: Emissions the landfill gas collection and control system. All closure construction activities have been completed. The facility closure certification was issued by the Ohio EPA on December 30, 2004.

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>
Closed municipal solid waste (MSW) landfill (no longer accepting waste) equipped with an active gas collection and control system (enclosed flare)	OAC rule 3745-31-05(A)(3) (PTI 16-02162)	<p>The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart WWW.</p> <p>Fugitive Landfill Emissions:</p> <p>7.73 tpy non methane organic compounds (NMOC)</p> <p>1,282 tpy methane (CH4)</p> <p>6.18 tpy volatile organic compounds (VOC)</p> <p>1.16 tpy combined hazardous air pollutants (HAPs)</p> <p>91 tpy TSP</p> <p>29 tpy PM-10</p> <p>Controlled Emissions From Flare:</p> <p>0.18 lb/hr NMOC 0.79 tpy NMOC</p> <p>33.2 lbs/hr CH4 145.4 tpy CH4</p> <p>0.24 lb/hr VOC 1.04 tpy VOC</p>

Facility Name: City of Akron Hardy Rd. Sanitary Landfill

Facility ID: 16-77-01-0976

Emissions Unit: Landfill Operations (P902)

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
		0.85 lb/hr PM-10 3.75 tpy PM-10
		1.05 lbs/hr sulfur dioxide (SO ₂) 4.60 tpy SO ₂
		3.71 lbs/hr nitrogen oxides (NO _x) 16.26 tpy NO _x
		20.2 lbs/hr carbon monoxide (CO) 88.48 tpy CO
		0.60 lb/hr hydrochloric acid (HCl) 2.61 tpy HCl
	OAC rule 3745-17-07(A)	See A.I.2.b below.
	40 CFR Part 60, Subpart WWW	methane concentration from the collection system shall be less than 500 parts per million above background at the surface of the landfill
		enclosed flare shall be designed and operated in accordance with 40 CFR 60.18
		no visible emissions from the flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours
		See sections A.I.2.a and A.I.2.c through A.I.2.e below.
	40 CFR Part 63, Subpart AAAA	The requirements of this rule include the requirements of 40 CFR Part 60, Subpart WWW and 40 CFR 63.6(e)(3).
		See section A.III.11 below.

2. Additional Terms and Conditions

- 2.a** The permittee shall operate and maintain a collection and control system that meets the design requirements of 40 CFR Part 60, Subpart WWW.
- 2.b** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart WWW.

2. Additional Terms and Conditions (continued)

2.c 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.d 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 paragraph (a) and (b) or the requirements in paragraph (c):

(a) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is 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, 1.740×10^{-7} (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mole/scm) is 20 degree 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

2. Additional Terms and Conditions (continued)

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 section 60.17) if published values are not available or cannot be calculated.

(b) 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:

(i) steam-assisted and nonassisted flare shall be designed for and operated with an exit velocity of equal to or greater than 18.3 m/sec. (60 ft/sec), but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf); and

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

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

where:

VAX = 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.(a) above.

(c) Flares shall be used that 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, VAX, as determined by the following equation:

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

where:

VAX = maximum permitted velocity, 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 ASTM Method D1946-77.

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

$$VAX = 8.706 + 0.7084 (H_t)$$

where:

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

8.706 = constant;

0.7084 = constant; and

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

2. Additional Terms and Conditions (continued)

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 55 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 Given the applicability of 40 CFR Part 63, Subpart AAAA, the permittee must also comply with applicable provisions of 40 CFR Part 63, Subpart A as referenced in Table 1 of 40 CFR Part 63, Subpart AAAA (see Attachment 1).

The permittee shall comply with the requirements contained in Table 1 in accordance with 40 CFR Part 63, Subpart AAAA which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully written.

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 in place for 5 years or more if active, or for 2 years or more if closed or at final grade.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(a))

2. The permittee shall operate the collection system with negative pressure at each well 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.)

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

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(b))

3. The permittee shall operate each interior well 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.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(c))

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. For exceedances, refer to section A.III.3.d.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(d))

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 section A.I.2.a. In the event, the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(e))

II. Operational Restrictions (continued)

6. The permittee shall operate the flare at all times when the collected gas is routed to the system.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162 and 40 CFR Part 60.753(f))

7. A pilot flame shall be maintained at all times in the flare's pilot light burner, or a fail-close valve shall be installed to cease gas flow to the flare when there is no flame present.

(Authority for term: OAC rule 3745-77-07(A)(1) and PTI 16-02162)

III. Monitoring and/or Record Keeping Requirements

1. For the active gas collection system, the permittee shall install a sampling port for each well 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.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.756(a))

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 30 meters apart (or a site-specific established spacing) 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.
- 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.5:
 - 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. Monitoring and/or Record Keeping Requirements (continued)

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.

e. If the closed landfill has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods, the permittee may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.755(c) and 40 CFR Part 60.756)

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.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.756(c))

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.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.756(c))

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

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:

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

where:

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

L_o = 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; and

c = time since closure, years (for an active landfill $c = 0$ and $(e \text{ to the power } -kc) = 1$).

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

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

where:

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

k = methane generation rate constant, per year;

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

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

t_i = 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.6.a.i. and 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 paragraphs A.III.6.a.i. or 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 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 40 CFR Part 60.18; and

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

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.755(a))

6. The permittee shall properly install, operate, and maintain a device to continuously monitor the flare 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 flame; and

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

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

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.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.758(d))

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 OEPA, Division of Solid and Infectious Waste Management, and shall satisfy this permit condition.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.758(a))

9. The permittee shall conduct surface testing around the perimeter of the collection area along a pattern that traverses the landfill at 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.755(c)(1))

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

10. The permittee shall develop and implement a written SSM plan in accordance with 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site at the facility.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63.1960)

11. The permittee shall, upon each visit to this closed facility, and at a minimum of once per month during normal operating conditions, visually inspect the flare and record whether or not any visible emissions are present and the duration of any visible emissions.

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

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 Akron RAQMD 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.

(Authority for term: PTI 16-02162 and OAC rule 3745-77-07(C)(1))

2. The permittee shall submit an equipment removal report to the Akron RAQMD 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in 40 CFR Part 60.757(e)(1). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752(b)(2)(v) have been met.

(Authority for term: PTI 16-02162 and OAC rule 3745-77-07(C)(1) and 40 CFR Part 60.757(d))

3. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

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

b. any record which indicates that the nitrogen or oxygen concentration in the landfill gas was greater than 20% or 5%, respectively;

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 was not functioning properly (the reports shall include a statement of equipment used, operations, and procedures for operation of the flare, if a pilot flame is not used, in addition to periods when the flare was not functioning properly); 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 Term and Condition A.I.c.ii of this permit.

(Authority for term: PTI 16-02162 and OAC rule 3745-77-07(C)(1))

IV. Reporting Requirements (continued)

4. The permittee shall submit semiannual reports which include the following:
 - a. the value and length of time for exceedance of applicable parameters monitored un 40 CFR 60.756(a), (b), (c), and (d);
 - b. a description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756;
 - c. a description and duration of all periods when the control device was not operating for a period exceeding 1 hour and the length of time the control device was not operating;
 - d. all periods when the collection system was not operating in excess of 5 days;
 - e. the location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month; and
 - f. any record indicating the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR Parts 60.755(a)(3), (b), and (c)(4).

These reports shall be submitted by January 31 and July 30 of each year.

(Authority for term: PTI 16-02162 and OAC rule 3745-77-07(C)(1) and 40 CFR Part 63.1980)

5. The permittee shall submit semiannual reports which include an identification of any record showing that visible emissions were present from the flare. The reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6 calendar months.

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

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):

- 1.a Emission Limitation:

7.73 tpy non methane organic compounds (NMOC) fugitive landfill emissions

Applicable Compliance Method:

Compliance shall be demonstrated using the latest version of US EPA's "Landfill Gas Emissions Model" software.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

- 1.b Emission Limitation:

1,282 tpy methane (CH₄) fugitive landfill emissions

Applicable Compliance Method:

Compliance shall be demonstrated using the latest version of US EPA's "Landfill Gas Emissions Model" software.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

V. Testing Requirements (continued)

1.c Emission Limitation:

6.18 tpy volatile organic compounds (VOC) fugitive landfill emissions

Applicable Compliance Method:

Multiply the NMOC emissions, in tons per year, by 80% to convert to VOC emissions. The conversion rate was established per 61 Federal Register 9912, dated March 12, 1996.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.d Emission Limitation:

1.16 tpy combined hazardous air pollutants (HAPs) fugitive landfill emissions

Applicable Compliance Method:

Multiply the NMOC emissions, in tons per year, by 15% to convert to combined HAP emissions. The conversion rate was established per 65 Federal Register 66677, dated November 7, 2000.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.e Emission Limitation:

91 tpy TSP fugitive landfill emissions

Applicable Compliance Method:

total particulate emissions from construction/operation = (topsoil removal/daily cover) + (dozers onsite) + (overburden drilling) + (blasting) + (overburden removal) + (overburden truck dumping) + (road maintenance)

where:

topsoil removal = 6×10^{-5} tons TSP per ton of topsoil removed or covered * [(tons topsoil removed/year) + (tons topsoil daily cover/year)]

dozers onsite = 1.6×10^{-2} tons TSP per dozer hr * [#dozers] * (hr/day dozer operator) * OD]

overburden drilling = 7.5×10^{-4} tons TSP per hole drilled * (holes drilled/year)

blasting = 6×10^{-4} tons TSP per ton of overburden removed * (ton/yr of overburden removed)

overburden removal = 1.85×10^{-5} tons TSP per ton of overburden removed * (ton/yr of overburden removed)

overburden truck dumping = 4.0×10^{-6} tons TSP per ton of overburden removed * (ton/yr of overburden removed)

road maintenance = 1.6×10^{-2} tons TSP per dozer hour operator * [(hr/day road maintenance) * OD]

The emission factors were supplied by the facility and are calculated in accordance with AP-42 equations for the appropriate operations.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

V. Testing Requirements (continued)

1.f Emission Limitation:

29 tpy PM-10 fugitive landfill emissions

Applicable Compliance Method:

Multiply the maximum annual TSP emissions by the PM-10 particle size multiplier of 0.36.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.g Emission Limitations:

0.18 lb/hr NMOC (flare emissions)

0.79 tpy NMOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the NMOC emission rate, as calculated by USEPA Landfill Emissions Model (LandGEM), by an average capture efficiency of 85% and a flare destruction efficiency of 98%.

The tpy emission limitation was developed by multiplying the short-term allowable NMOC limitation (0.18 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.h Emission Limitations:

33.2 lbs/hr CH₄ (flare emissions)

145.4 tpy CH₄

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the methane emission rate, as calculated by USEPA Landfill Emissions Model (LandGEM), by an average capture efficiency of 85% and a flare destruction efficiency of 98%.

The tpy emission limitation was developed by multiplying the short-term allowable CH₄ limitation (33.2 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

V. Testing Requirements (continued)

1.i Emission Limitations:

0.24 lb/hr VOC (flare emissions)
1.04 tpy VOC

Applicable Compliance Method:

Multiply the NMOC emissions by 80% to convert to VOC emissions. The conversion rate was established per 61 Federal Register 9912, dated March 12, 1996.

The tpy emission limitation was developed by multiplying the short-term allowable VOC limitation (0.24 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.j Emission Limitations:

0.85 lb/hr PM-10 (flare emissions)
3.75 tpy PM-10

Applicable Compliance Method:

Compliance with the pound per hour limitation shall be demonstrated by multiplying the facility-supplied emission factor of 0.05 grain PM-10/scf by the maximum air flow rate of 2000 scf/min.

$(0.05 \text{ gr PM-10/scf}) * (2,000 \text{ scf/min}) * (\text{lb PM-10}/7,000 \text{ gr PM-10}) * (60 \text{ min/hr}) = 0.85 \text{ lb/hr PM-10}$

The tpy emission limitation was developed by multiplying the short-term allowable PM-10 limitation (0.85 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.k Emission Limitations:

1.05 lbs/hr SO₂ (flare emissions)
4.60 tpy SO₂

Applicable Compliance Method:

$(53,604 \text{ lb-mole S}/109 \text{ lb-mole fuel}) * (0.97) * (316.24 \text{ lb-mole fuel/hr}) * (1 \text{ lb-mole SO}_2/1 \text{ lb-mole S}) * (64.06 \text{ lb SO}_2 / 1 \text{ lb-mole SO}_2) = 1.05 \text{ lbs/hr SO}_2$

The total concentration of sulfur available to react was submitted by the facility and is based on samples collected at similar landfills. The calculation assumes that 97% of the sulfur concentration will convert to SO₂ instead of SO₃.

The tpy emission limitation was developed by multiplying the short-term allowable SO₂ limitation (1.05 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

V. Testing Requirements (continued)

1.l Emission Limitations:

3.71 lbs/hr NO_x (flare emissions)

16.26 tpy NO_x

Applicable Compliance Method:

Multiply the maximum flow rate by the design methane concentration of 50%, the lower heating value for methane of 910 Btu/scf, and the facility-supplied emission rate of 0.068 lb NO_x/MMBtu.

$$(2,000 \text{ scf/min}) * (0.5 \text{ cf CH}_4/\text{cf}) * (910 \text{ Btu/cf CH}_4) * (60 \text{ min/hr}) * (1 \text{ MM Btu}/106 \text{ Btu}) * (0.068 \text{ lb NO}_x/\text{MMBtu}) = 3.71 \text{ lbs/hr NO}_x$$

The tpy emission limitation was developed by multiplying the short-term allowable NO_x limitation (3.71 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.m Emission Limitations:

20.2 lbs/hr CO (flare emissions)

88.48 tpy CO

Applicable Compliance Method:

Multiply the maximum flow rate by the design methane concentration of 50%, the lower heating value for methane of 910 Btu/scf, and the facility-supplied emission rate of 0.37 lb CO/MMBtu.

$$(2,000 \text{ scf/min}) * (0.5 \text{ cf CH}_4/\text{cf}) * (910 \text{ Btu/cf CH}_4) * (60 \text{ min/hr}) * (1 \text{ MM Btu}/106 \text{ Btu}) * (0.37 \text{ lb CO}/\text{MMBtu}) = 20.2 \text{ lbs/hr CO}$$

The tpy emission limitation was developed by multiplying the short-term allowable CO limitation (20.2 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

V. Testing Requirements (continued)

1.n Emission Limitations:

0.60 lb/hr HCl (flare emissions)
2.61 tpy HCl

Applicable Compliance Method:

$(4,323.1 \text{ lb-mole Cl}/109 \text{ lb-mole exhaust}) \times (0.98) \times (3,780.78 \text{ lb-mole exhaust/hr}) \times (1 \text{ lb-mole HCl}/1 \text{ lb-mole Cl}) \times (36.46 \text{ lb HCl} / 1 \text{ lb-mole HCl}) = 0.60 \text{ lb/hr HCl}$

The total concentration of chlorine available to react was submitted by the facility and is based on samples collected as similar landfills. The calculation assumes that 99% of the chlorine concentration will convert to HCl instead of CL₂.

The tpy emission limitation was developed by multiplying the short-term allowable HCl limitation (0.60 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

1.o Emission Limitation:

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

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162)

2. Should more accurate emission factors be developed, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, the Akron RAQMD, and the Akron Regional Landfill, Inc.

(Authority for term: PTI 16-02162)

3. The nitrogen level shall be determined using Method 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.753(c)(1))

4. 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%.

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.753(c)(2))

V. Testing Requirements (continued)

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 purposes 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 40 CFR Part 60.754(b), (b)(1), and (b)(2). The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Ohio EPA as provided in 40 CFR Part 60.752(b)(2)(i)(B).

(Authority for term: OAC rule 3745-77-07(C)(1) and PTI 16-02162 and 40 CFR Part 60.753(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>
Closed municipal solid waste (MSW) landfill (no longer accepting waste) equipped with an active gas collection and control system (enclosed flare)		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: hydrogen chloride

TLV (ug/m3): 7.5

Maximum Hourly Emission Rate (lbs/hr): 0.60

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.779

MAGLC (ug/m3): 177.5

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

2. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":
 - 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 specified in the above table;
 - b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
 - c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
 - d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
3. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
 - b. 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

THIS IS THE LAST PAGE OF THE PERMIT

Attachment 1

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