State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL MODIFICATION** **CERTIFIED MAIL**
**HAMILTON COUNTY**

Street Address: Mailing Address:
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Lazarus Gov. Center

**Application No:** 14-05302

**DATE:** 10/9/2003

Rumpke Sanitary Landfill, Inc
John Butler
10795 Hughes Rd
Cincinnati, OH 45251-4598

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **$ 0** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

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

**CC: USEPA HCDES OH-KY-IN Regional Council of Gov. KY IN**

**HAMILTON COUNTY**

PUBLIC NOTICE

ISSUANCE OF DRAFT PERMIT TO INSTALL **14-05302** FOR AN AIR CONTAMINANT SOURCE FOR **RUMPKE SANITARY LANDFILL, INC**

On 10/9/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Rumpke Sanitary Landfill, Inc**, located at **10795 Hughes Rd, Cincinnati**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05302:

**slope reconstruction - modification.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Harry Schweitering, Hamilton County Department of Environmental Services, 250 William Howart Taft Pkwy, Cincinnati, OH 45219-2660 [(513)946-7777]

**DRAFT MODIFICATION OF PERMIT TO INSTALL 14-05302**

| | |
|---|---|
| Application Number: | 14-05302 |
| APS Premise Number: | 1431092049 |
| Permit Fee: | **To be entered upon final issuance** |
| Name of Facility: | Rumpke Sanitary Landfill, Inc |
| Person to Contact: | John Butler |
| Address: | 10795 Hughes Rd<br>Cincinnati, OH 45251-4598 |

Location of proposed air contaminant source(s) [emissions unit(s)]:
**10795 Hughes Rd**
**Cincinnati, Ohio**

Description of proposed emissions unit(s):
**Slope reconstruction - modification.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## A. State and Federally Enforceable Permit To Install General Terms and Conditions

### 1. Monitoring and Related Recordkeeping 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.

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

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

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

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 recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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.

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.

**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, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.
Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

**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.

**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.

**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.

**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. 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.

**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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

**8. 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.

**9. Compliance Requirements**

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

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 ORC section 3704.08.

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.

**10. Permit To Operate Application**

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

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

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

**11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**12. 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.

**B. State Only Enforceable Permit To Install General Terms and Conditions**

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the 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 state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the 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.)

**3. 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.

**4. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**5. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**6. Public Disclosure**

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

**7. Applicability**

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

**8. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. 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.

## C. Permit To Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

| Pollutant | Tons Per Year |
|---|---|
| NMOC | 482.65 |
| Methane | 42,286 |
| CO | 59.77 |
| PM | 1.34 |
| PM10 | 1.09 |
| NOx | 6.66 |
| SO2 | 7.11 |
| HCl | 25.62 |
| HF | 3.28 |

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements |
|---|---|
| P902 - Solid waste disposal and landfill gas generation - Slope reconstruction modification | OAC rule 3745-31-05(A)(3) |
| MSW landfill equipped with active gas collection and control system (flare/landfill gas recovery for sale or use) | |
| | 40 CFR, Part 60, Subpart WWW |
| | 40 CFR, Part 61, Subparts A and M and OAC rule 3745-20 |
| | OAC rule 3745-17-07(A) |
| | OAC rule 3745-21-07(J)(2) |

| | | |
|---|---|---|
| OAC rule 3745-23-06(B)<br><br>40 CFR Part 63, Subpart AAAA | Applicable Emissions Limitations/Control Measures<br><br>Emissions from the gas recovery plant (stack emissions) shall not exceed the following:<br>7.91 lbs/hour NMOC<br>34.65 TPY NMOC<br>599 TPY Methane<br><br>9.68 lbs/hour CO<br>42.44 TPY CO<br>0.2 lb/hour PM<br>0.86 TPY PM<br>0.2 lb/hour PM10<br>0.86 TPY PM10<br>1.5 lbs/hour NOx<br>6.66 TPY NOx<br>1.62 lbs/hour SO2<br>7.11 TPY SO2<br>25.62 TPY HCl<br>3.28 TPY HF<br><br>Fugitive emissions from this emissions unit shall not exceed the following:<br><br>448 TPY NMOC<br>41,687 TPY Methane<br><br>17.33 TPY CO<br>0.48 TPY PM<br>0.23 TPY PM10<br><br>See Sections A.I.2.f, A.I.2.g, A.I.2.i and A.II..9.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-20, , | 3745-23-06(B), Federal regulations 40 CFR Part 60 Subpart WWW and 40 CFR Part 61 Subpart M,<br><br>See Sections A.I.2. b through A.I.2.e, A.II.1 - A.II.6 and A.II. 10 - A.II. 14.<br><br>See Sections A.I.2.g, A.I.2. l, A.II. 7 and A.II..<br><br>.<br><br>See Sections A.I.2.h<br><br>See Section A.I.2.m<br><br>See Section A.I.2.a<br><br>See Sections A.II.16 and 17 |

**2. Additional Terms and Conditions**

**2.a** The permittee shall minimize the NOx emissions from this emissions unit by the use of the best available control techniques and operating practices in accordance with best current technology.

**2.b** 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.c** The permittee shall comply with either of the following:

i. All landfill gas collected shall be routed to a control system designed and operated within the parameters demonstrated during the performance test to reduce non-methane organic compound (NMOC) emissions by 98 percent by weight, or when an enclosed combustion device is used for control, to either reduce NMOC emissions by 98 percent by weight or reduce the outlet NMOC emission concentration to less than 20 parts per million (ppm) by volume, dry basis as hexane at 3 percent oxygen. The term enclosed combustor shall include the thermal oxidizer (TOx) units 1 and 2 at the Rumpke Recovery Plant.

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

**2.d** 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 a closed landfill as defined in 40 CFR Part 60.751. A closure report shall be submitted to the Department of Environmental Services as provided in 60.757(d).

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

iii. Following the procedures specified in 40 CFR 60.754(b), 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.e** The equipment that constitutes the gas collection and control system shall be properly maintained and kept in good operating condition at all times.

**2.f** For all waste handling materials, except asbestos-containing materials (ACM):

i. The fugitive visible particulate emissions shall not exceed 20% opacity, as a 3-minute average.

ii. Use of reasonably available control measures, to minimize or eliminate the emissions of fugitive dust.

**2.g** For Asbestos Containing Material (ACM):

i. There shall be no visible emissions.

ii. Use of handling procedures and control measures, to prevent the emissions of fugitive dust.

**2.h** Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except as specified by rule.

**2.i** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the visible particulate emissions limitations, a well designed and well operated landfill gas collection system and a control system capable of reducing NMOC in the collected gas by 98 percent or an outlet concentration of 20 ppmv hexane at 3 percent oxygen, reasonable available control measures to minimize or eliminate emissions of fugitive dust from solid waste disposal operations, compliance with 40 CFR Part 60 Subpart WWW, 40 CFR Part 61 Subpart M and 40 CFR Part 63 Subpart AAAA and compliance with the Air Toxics Policy.

**2. j** The hourly emission limitation outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

**2.k** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection

Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

**2.l** The application and enforcement of the provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 61, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 61 are also federally enforceable.

**2.m** All waste organic materials vented to an open flare shall be burned by a smokeless flare.

## II. Operational Restrictions

1. Whenever the enclosed combustor is in operation, the average combustion temperature shall be at least 1,400 degrees Fahrenheit, for any 3-hour block of time (or higher temperature needed to ensure a 98 percent by weight destruction of the NMOCs), measured by the temperature indicator.

2. 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.

3. The permittee shall operate the collection system with negative pressure at each wellhead except under the following conditions:

   a. A fire or increased well temperature (the permittee shall record all 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).

4. The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 65 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 level, or oxygen level at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

5. The permittee shall operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill.

6. 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.c. In the event, the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the

collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

7. Disposal Requirements for ACM:

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

b. The permittee shall implement and maintain an "Asbestos Disposal Operating Procedure and Spill Contingency Plan" ("Plan") consisting of: authorized personnel training, inspection and disposal operating procedures, non-conforming load response procedures, inventory and maintenance procedures for safety and emissions control equipment, record keeping procedures, and emergency notification procedures. Authorized personnel shall be knowledgeable in the procedures, and the Plan shall be available for inspection at this facility at all times.

c. The permittee shall inspect each load of ACM delivered to the facility. The inspection shall consist of a visual examination to ensure that each shipment of ACM is received in intact, leak-tight containers labeled with appropriate hazard warning labels, the name of the waste generator, and the location of waste generation. The inspection also shall determine whether the waste shipment records accompany the consignment and accurately describe the waste material and quantity.

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

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

e. The permittee shall establish restricted access, adequate to deter the unauthorized entry of the general public and any unauthorized personnel, within 100 feet of the unloading, deposition, and burial areas for the asbestos-containing waste materials. A hazard warning shall be displayed on signs not less than 20 x 14 inches in size, posted so they are visible before entering an area with asbestos waste disposal operations in progress; or, alternatively, mark vehicles used to transport asbestos-containing waste materials with 21 x 14 inch signs so that the signs are displayed in such a manner and location that a person can easily read the legend. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend:

ASBESTOS WASTE DISPOSAL SITE
DO NOT CREATE DUST
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

Notation
2.5 cm (1 inch) Sans Serif, Gothic or Block
2.5 cm (1 inch) Sans Serif, Gothic or Block
1.9 cm (3/4 inch) San Serif, Gothic or Block
14 Point Gothic

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

8. The permittee shall cover and compact asbestos wastes in accordance with the following:

   a. As soon as practicable after the placement of friable asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day shall be covered with at least 12 inches of non-ACM. Once the ACM are covered, the area may be compacted.

   b. Care shall be taken to ensure that disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of condition .8.a. above.

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

Emissions control equipment shall be available for wetting and containing asbestos in the event of a release or non-conforming load disposal. All equipment required to implement the Plan shall be maintained in accordance with good engineering practices to ensure that the equipment is in a ready-to-use condition and in an appropriate location for use.

9 The permittee shall ensure that solid wastes are deposited, spread and compacted in such a manner as to minimize or prevent visible emissions of dust. All truckloads of solid waste shall be unloaded in a manner which will minimize the drop height of the solid wastes. Any dusty materials or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in order to minimize or eliminate visible emissions of fugitive dust. Watering shall be conducted in such a manner as to avoid the pooling of liquids and runoff. No dusty material shall be dumped during periods of high wind speed, unless the material has been treated to prevent fugitive dust emissions from becoming airborne.

10. The permittee shall operate the recovery treatment system at all times when the collected gas is routed to the system.

11. The permittee shall either burn the gas in the enclosed combustor as required above or collect and sell as fuel.

12. The collection system shall be designed to meet the requirements of 40 CFR 60.759.

13. The permittee shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of

    a. 5 years or more if active; or

    b. 2 years or more if closed or at final grade.

14. The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

15. There shall be no open burning in violation of OAC rule 3745-19.

16. The permittee shall develop a written startup, shutdown and malfunction plan and follow the requirements as outlined in 40 CFR Part 63.6 (e). This plan shall be developed by January 16, 2004 and be maintained on site.

17. The permittee shall comply with the general provisions outlined in Table 1 of 40 CFR Part 63 Subpart AAAA.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the enclosed combustor when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. All 3-hour blocks of time during which the average combustion temperature within the enclosed combustor, when the emissions unit was in operation, was less than 1400 degrees Fahrenheit.

   b. A log of the downtime for the recovery treatment system when the associated emissions unit was in operation.

2. For the active gas collection system, the permittee shall install a sampling port and a thermometer, or other temperature measuring device, or an access port for temperature measurements at each wellhead and record the following information on a monthly basis:

   a. The gauge pressure in the gas collection header at each individual well, in psi.

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

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

   If a well exceeds one of the operating parameters specified in term A.II.3 and A.II.4, except as provided under 40 CFR 60.753(b) and (c), action shall be initiated to correct the exceedances within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative time line for correcting the exceedance may be submitted to the Department of Environmental Services for approval.

3. The permittee shall either install, calibrate, maintain, and operate, according to the manufacturer's specifications, a device that records the flow to the enclosed combustor, treatment system, and bypass stack, and collect and record the flow at least every fifteen minutes; or secure the bypass line valve in the closed position with a car-seal or 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.

4. 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.

5. 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-to-year waste acceptance rate, and maximum expected gas generation flow 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.

6. The permittee shall monitor surface concentrations of methane on a quarterly basis as follows:

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

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

   c. Surface emission monitoring shall be performed in accordance with Section 4.3.1 of Method 21 of Appendix A of 40 CFR, Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

   d. Any reading of 500 ppm 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. 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 time line 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 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified above shall be taken.

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

7. The permittee shall maintain records of the following information:

a. The waste shipment record form for each shipment of ACM.

b. The location, depth and area, and quantity in cubic yards of all ACM within the disposal site, on a map or diagram of the disposal area.

8. The permittee shall require that all asbestos waste shipments received be accompanied by a waste shipment record. The waste shipment records shall include the following information:

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

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

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

d. The name and address of the local, state or USEPA regional agency responsible for administering the asbestos NESHAP program.

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

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

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

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

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

j. The name, address and phone number of the transporter.

k. Signature by the transporter to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in Condition a through i.

l. A discrepancy indication space to be completed by the transporter or waste shipment owner or operator if any improperly contained asbestos waste is observed or if there is any discrepancy in the quantity of asbestos shipped and the quantity of asbestos waste received at the asbestos waste disposal site. Significant amounts of improperly contained waste shall be reported in writing to the Ohio EPA by the following working day. The report shall include a copy of the waste shipment.

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

n. Signature by the waste disposal site operator to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in conditions a through i above, except as noted in the discrepancy indication space.

o. The date of receipt.

The waste shipment record forms shall be retained at the facility for at least two years, and shall be made available for inspection upon request.

9. The permittee shall maintain the following information for the life of the recovery treatment system as measured during the initial performance test or compliance demonstration:

a. The maximum expected gas generation flow rate, in $m^3$/yr as calculated based on the following:

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

Qm = 2Lo x R x {(e to the power -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, megagram 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 rate:

Qm = Summation of 2kLoMi 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, in megagrams
ti = age of the i th section, in years

iii. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs A.III..9.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.9.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 emissions 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.

10. Except as otherwise provided in this section, the permittee shall perform inspections of the landfill operation areas for visible particulate emissions in accordance with the following frequencies:

| landfill areas | minimum inspection frequency |
|---|---|
| all landfill areas | once daily during normal operation |

11. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures for fugitive particulate emissions. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for a landfill operating area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

13. The permittee shall maintain records of the following information:

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

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

    c. The dates the control measures were implemented.

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

## 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 Hamilton County Department of Environmental Services 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. In the event of a potential emergency, such as a fire within the landfill, wells affected may be temporarily shut off, which could result in a positive gauge pressure. The Hamilton County Department of Environmental Services shall be notified within one working day of any shutdowns of any wells due to an emergency.

3. The permittee shall submit quarterly deviation (excursion) reports that include the following information:

    a. An identification of each month during which the gauge pressure in the gas collection header gave a positive pressure reading, and the actual gauge pressure reading for each such month.

b. An identification of each period during which the temperature in the enclosed combustor was less than 1400 degrees Fahrenheit for any 3-hour blocks of time, and a copy of the recorded chart for each such period.

c. An identification of each month during which the temperature and nitrogen or oxygen limitations specified in Section A.II.4. were exceeded.

d. An identification of each quarter during which the methane concentration measured at the surface of the landfill was greater than 500 ppm above the background levels.

e. All periods when the gas stream is diverted from the control device or recovery system 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.

f. A listing of all periods when the collection system was not operating in excess of five days.

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

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

i Any record which indicates that the temperature of the landfill gas was greater than 55 degrees Celsius or an alternative temperature approved by Ohio EPA.

j. Description and duration of all periods when the recovery treatment system was not operating for a period exceeding 1 hour and the length of time the recovery treatment system was not operating.

Should a deviation occur, the deviation report shall include details sufficient to determine compliance with the time line provisions established under 40 CFR 60. 755.

4. The permittee shall submit annual reports which include any record indicating the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR, Part 60.755(a)(3), (b), and (c)(4). These reports shall be submitted by January 31 of each year. The permittee shall submit annual reports which includes any record indicating the date of installation and the location of each well or collection system expansion added pursuant to 40 CFR, Part 60.755(a)(3), (b), and (c)(4). These reports shall be submitted by January 31 of each year.

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

6. The permittee shall submit an equipment removal report to the Hamilton County Department of Environmental Services 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.

7. The permittee shall submit the following information with the initial performance test report required pursuant to 40 CFR, Part 60.8:

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

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

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

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

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

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

8. The permittee shall submit written notification to the Director and to the board of health having jurisdiction, and place a copy of the notification in the operating record, as to the actual date that the unit(s) of the sanitary landfill facility ceased to accept solid waste, in accordance with paragraph (E) of rule OAC rule 3745-27-11. Written notification shall be received by the Director by no later than seven days after the date specified in the notification.

9. As soon as possible and no later than 30 days after receipt of the asbestos waste, the permittee shall send a copy of the signed waste shipment record to the waste generator.

10. The permittee shall submit quarterly reports summarizing the asbestos disposal activities. The reports shall contain the following information:

    a. The name, address and location of the facility; the calendar period covered by the report; and any changes in the methods of storage or the disposal operations.

    b. A list of all asbestos-containing waste consignments received including: the date received, the name of the waste generator, the name and location of the facility where the load originated, the quantity of asbestos, and any discrepancy or non-conformity discovered.

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

11. Upon discovering a discrepancy between the quantity of waste designated on a waste shipment record and the quantity actually received, the permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the State, local, district, or USEPA regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Hamilton County Department of Environmental Services. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

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

13. The permittee shall notify the Hamilton County Department of Environmental Services in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice:

    a. Scheduled starting and completion dates.

    b. Reason for disturbing the waste.

    c. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. (If deemed necessary, the Director may require changes in the proposed emission control procedures).

    d. Location of any temporary storage site and the final disposal site.

14. The permittee shall notify the Hamilton County Department of Environmental Services of any load of ACM which is rejected, or any non-conforming load disposed of in accordance with the

"Asbestos Spill Contingency Plan." Notification shall be provided as soon as possible by a phone contact, followed in writing by the next working day. The written notification shall provide a copy of the waste shipment record ("WSR"), if available, or when waste is not shipped with a WSR, provide available information concerning vehicle identification, source of the load, a description of the load, nature of discrepancy, and the location of disposal. If possible, non-conforming loads of suspect friable material shall be detained, or the location of disposal protected from damage, until the Hamilton County Department of Environmental Services is informed and provided the opportunity to inspect.

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

    a. Each day during which an asbestos and/or non-asbestos material handling operation inspection was not performed by the required frequency.

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

16. All deviation reports shall be submitted in accordance with General Term and Condition A.1.c.ii of this permit.

## V. Testing Requirements

1. Emission Limitation:

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

   Applicable Compliance Method:

   Emission testing using the following test methods shall be employed to demonstrate compliance with the control efficiency:

   for NMOC - Methods 25, 25C or 18 of 40 CFR, Part 60, Appendix A

   (Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.)

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 40 CFR, Part 60.752(b)(2)(i).

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

   a. the span shall be set so that the regulatory limit is between 20% and 50% of the span;

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

5. The flow rate of landfill gas, $Q_{lfg}$, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of 40 CFR, Part 60.

6. The average NMOC concentration, $C_{nmoc}$, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR, Part 60. If using Method 18 of Appendix A of 40 CFR, Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR, Part 60 by 6 to convert from $C_{nmoc}$ as carbon to $C_{nmoc}$ as hexane.

7. The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Director.

8. Emission Limitation:

   20% Opacity, as a three-minute average.

   Applicable Compliance Method:

   If required, ***c***ompliance shall be determined in accordance with Test Method 9 as set forth in

"Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996 and modifications listed in paragraph B(3)(a) and B(3)(b) of OAC rule 3745-17-03.

9. Emission Limitation:

20% Opacity, as a six-minute average.

Applicable Compliance Method:

If required compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

10. Emission Limitation:

No visible emissions from asbestos-containing materials.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

11. Emission Limitation:

Emissions from the gas recovery plant (stack emissions):

34.65 TPY NMOC
599 TPY Methane

42.44 TPY CO
0.86 TPY PM
0.86 TPY PM10
6.66 TPY NOx
7.11 TPY SO2
25.62 TPY HCl
3.28 TPY HF

Fugitive emissions:

448 TPY NMOC
41,687 TPY Methane

17.33 TPY CO
0.48 TPY PM
0.23 TPY PM10

Applicable Compliance Method:

Compliance with the allowable emission rates for the gas recovery plant shall be determined using the emissions factors from AP-42, USEPA's Landfill Gas Emissions Model (LandGEM) and the information submitted in PTI application 14-05302 received April 8, 2002. The fugitive particulate emissions from the solid waste landfilling operations shall be determined by using the emission factors in AP-42 Section 13.2.4 dated January, 1995. Fugitive emissions from the landfill are based USEPA's Landfill Gas Emissions Model (LandGEM) and AP-42 Section 2.4 dated November 1998.

## VI. Miscellaneous Requirements

1. The emissions from the slope reconstruction capacity increase are limited to the following:

| Pollutant | Emissions (TPY) |
|---|---|
| NMOC (Fugitive) | 140.8 |
| Methane (Fugitive) | 13,099 |
| VOC (Fugitive) | 37.3 |
| CO (Fugitive) | 2.67 |

The emissions from the gas recovery plant (stack emissions) do not increase due to the gas generation from the landfill not increasing above the baseline generation rates.

2. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-03417 as issued on June 15, 1994 and permit to install 14-822 as issued on September 5, 1985.

3. The following terms and conditions in this permit to install will become effective upon commencement of construction of the phase that increases the capacity of the landfill above the permitted limit in PTI 05-3567 as issued on February 17, 1994:

Part III.A.I.2.f, III.A.I.2.h, III.A.III.10,III.A.III.11, III.A.III.12, III.A.III.13, III.A.IV.3.g and h, III.A.IV.15, III.A.V.8, III.A.V.9, and B.III.1.

Commencement of construction is defined as placing of additional soil liner in the aforementioned phase.

4. Nothing in term III.A.VI.3 shall prohibit the permittee from complying with the requirements of

OAC rule 3745-31-06.

5. The terms and conditions of this permit to install supercede PTI 14-05302 as issued on August 4, 2003.

**B. State Only Enforceable Section**

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

**1.** The specific operations(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 specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P902 - solid waste disposal and landfill gas generation | | |

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit (P902) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISCST3 (00101) model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

   The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: hydrogen chloride

   TLV (ug/m3): 7458

Emissions Unit ID: P902

Maximum Hourly Emission Rate (lbs/hr): 0.74

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 1.63

MAGLC (ug/m3): 178

Pollutant: hydrogen sulfide

TLV (ug/m3): 13,940

Maximum Hourly Emission Rate (lbs/hr): 0.64

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 43.93

MAGLC (ug/m3): 332

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

a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

2. If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.
The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. When the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None