



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

**RE: DRAFT PERMIT TO INSTALL
JACKSON COUNTY
Application No: 06-07070**

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
AAAA	MACT
WWW, A, M	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 5/22/2003

Beech Hollow Sanitary Landfill
John Hattersley
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 for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. 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 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 may be issued in proposed or 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 a fee of **\$1000** 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, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

SEDO

KY

WV

JACKSON COUNTY

PUBLIC NOTICE

ISSUANCE OF DRAFT ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 06-07070

On 5/22/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of an administrative modification of a prior Permit To Install document for an air contaminant source for **Beech Hollow Sanitary Landfill**, located at **28 AW Long Rd, Wellston, Ohio**.

The administrative modification shall become effective upon final issuance.

Landfill expansion and roadways.

Comments concerning this draft action, or a request for a public hearing, 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.

Fred Klingelhafer, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138 [(740)385-8501]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 06-07070

Application Number: 06-07070

APS Premise Number: 0640020059

Permit Fee: **To be entered upon final issuance**

Name of Facility: Beech Hollow Sanitary Landfill

Person to Contact: John Hattersley

Address: 10795 Hughes Rd.
Cincinnati, OH 452514598

Location of proposed air contaminant source(s) [emissions unit(s)]:

**28 AW Long Rd
Wellston, Ohio**

Description of proposed emissions unit(s):

Landfill expansion and roadways.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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 emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the 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

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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	559.25 (480.25 increase)
VOC	36.0 (26.8 decrease)
HAPs	34.06 (22.26 increase)
Methane	42,812 (26504 increase)
NMOC	91.90 (13.4 increase)
NO _x	53.21 (155.8 decrease)
CO	198.52 (22.52 increase)
HCl	21.12 (17.72 increase)

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Roadways and Parking Areas Chapter 31 Modification (Terms in this permit supersede those identified in PTI# 06-06475, issued November 8, 2001 and PTI # 06-3025 issued August 22, 1994, see A.VI.2)	OAC rule 3745-31-05(A)(3)	Fugitive particulate emissions (PE) from all paved and unpaved roadways and parking areas shall not exceed 449.9 TPY best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.c through A.I.2.j)
paved roadways and parking areas (see section A.I.2.a)	OAC rule 3745-31-05(A)(3)	no visible particulate emissions except for one (1) minute during any 60-minute period for all paved roadways and parking areas
unpaved roadways and parking areas (see section A.I.2.b)	OAC rule 3745-31-05(A)(3)	no visible particulate emissions except for three (3) minutes during any 60-minute period for all unpaved roadways and parking areas

2. Additional Terms and Conditions

- 2.a The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

Entrance / Exit roadway from US 32 to scale house.

paved parking areas:

All paved parking areas

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

unpaved roadways:

All unpaved roadways

unpaved parking areas:

All unpaved parking areas

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance and enforce a 5 mph posted speed limit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water spray and surface improvements at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking

area, that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.k** This facility is located in Jackson County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas, in accordance with the following frequencies:

<u>paved roadways/ parking areas</u>	<u>minimum inspection frequency</u>
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Entrance / Exit roadway from US 32 to scale house daily

unpaved roadways/ parking areas

minimum inspection frequency

All unpaved roadways/parking areas

daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic/operating conditions. No inspection shall be necessary for a roadway, parking area or construction 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.
3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

This information shall be kept separately for (i) the paved roadways and parking areas, (ii) the unpaved roadways and parking areas and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions.

V. Testing Requirements

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

- a. Emission Limitation:

no visible emissions except for one (1) minute during any 60-minute period, for paved roadways and parking areas

no visible emissions except for three (3) minutes during any 60-minute period, for unpaved roadways and parking areas

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.

- b. Emission Limitation:

Fugitive particulate emissions from roadways and parking areas shall not exceed 449.9 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated by employing the emission factor derived from the equations in AP-42, Compilation of Air Pollution Emission Factors, Chapter 13.2.1.3 (10/02), for paved roadways and parking areas, and Chapter 13.2.2 (9/98), for unpaved roadways and parking areas and applying an overall emission control factor of 75% for the application of water, surface improvements and control technologies.

VI. Miscellaneous Requirements

None

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Roadways and Parking Areas Chapter 31 Modification (Terms in this permit supersede those identified in PTI# 06-06475, issued November 8, 2001 and PTI # 06-3025 issued August 22, 1994)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

Beech Hollow Sanitary Landfill

PTI Application: 06-07070

Issued: To be entered upon final issuance

Facility ID: 0640020059

Emissions Unit ID: F001

VI. Miscellaneous Requirements

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P901 - MSW Landfill with Asbestos disposal. These operations include Landfill operations associated with the load-in and load-out of MSW and wind erosion from the surface of the landfill Chapter 31 Modification (Terms in this permit supersede those identified in PTI# 06-06475, issued November 8, 2001 and PTI # 06-3025 issued August 22, 1994)	OAC rule 3745-31-05(A)(3)	Emissions of non-methane organic compounds (NMOC) shall not exceed 91.9 TPY Emissions of methane (CH ₄) shall not exceed 42,812 TPY Emissions of volatile organic compounds (VOC) shall not exceed 36.0 TPY. Emissions of nitrogen oxide compounds (NO _x) shall not exceed 53.21 TPY. Emissions of carbon monoxide (CO) shall not exceed 198.52 TPY. Emissions of sulfur dioxide (SO ₂) shall not exceed 13.5 TPY. Emissions of hydrogen chloride (HCl) shall not exceed 21.12 TPY. Total emissions of hazardous air pollutants (HAP) shall not exceed 34.06 TPY. Visible fugitive particulate emissions from non-asbestos operations shall not

facility construction activities, including construction storage piles and overburden material (see section A.I.2.r)

OAC rule 3745-20,
40 CFR Part 61, Subparts A and M

40 CFR Part 60, Subpart WWW

40 CFR Part 63, Subpart AAAA

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-08(B)

OAC rule 3745-19

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1)

exceed 10 percent opacity as a six-minute average.

Emissions of particulate shall not exceed 15.1 ton per year.

Best available control measures shall be used that are sufficient to minimize or eliminate visible emissions of fugitive dust.

(See section A.I.2.n)

The requirements established pursuant to this rule are equivalent to the requirements of OAC Chapter 3745-20; 40 CFR Part 61, Subparts A and M; 40 CFR Part 60, Subpart WWW; 40 CFR Part 63, Subpart AAAA and OAC Chapter 3745-19.

See A.I.2.a through A.I.2.g below.

See A.I.2.h through A.I.2.m below.

See A.I.2.o, A.I.2.q, A.III.14., and A.III.21., A.IV.14. through A.IV.16. below.

See A.I.2.p. below.

See A.I.2.p. below.

See A.II.1 below.

no visible particulate emissions except for three (3) minutes during any 60 minute period.

best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.s thru A.I.2.w)

OAC rule 3745-17-08(B)	Fugitive PE from facility construction, including storage piles, shall not exceed 94.4 TPY. See A.I.2.p. below. See A.I.2.p. below.
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2. Additional Terms and Conditions

- 2.a** There shall be no visible emissions from asbestos-containing materials during on-site transportation, transfer, unloading, deposition or compacting operations.
- 2.b** Deposition and burial operations shall be conducted in a careful manner that prevents asbestos-containing materials from being broken up or dispersed before the materials are buried.
- 2.c** 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 of the asbestos-containing waste materials. A hazard warning shall be displayed on signs not less than 20 x 14 inches in size, posted so they are visible before entering an area with asbestos waste disposal operations in progress; or, alternatively, mark vehicles used to transport asbestos-containing waste materials with 20 x 14 inch signs so that the signs are displayed in such a manner and location that a person can easily read the legend. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend:

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

Notation:

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

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

- 2.d** The permittee shall cover and compact asbestos wastes in accordance with the following:

- i. As soon as practical after the placement of friable asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day shall be covered with at least 12 inches of non-asbestos-containing materials. Once the asbestos-containing materials are covered, the area may be compacted.
 - ii. 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 (d)(i) above.
 - iii. 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.
- 2.e** 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.
- 2.f** 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.
- 2.g** If this emissions unit is permanently closed, the permittee shall comply with all of the applicable provisions of OAC rule 3745-20-07.
- 2.h** If the annual, recalculated or estimated nonmethane organic compound (NMOC) emission rate is equal to or greater than 50 megagrams (55 tons) per year:
 - i. The permittee shall submit, within 12 months, a collection and control system design plan in accordance with 40 CFR 60.752(b)(2)(i).
 - ii. The permittee shall install a collection and control system that captures the gas generated within the landfill, as required by 40 CFR 60.752(b)(2)(ii)(A) or (B) and (b)(2)(iii) within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2). If the permittee installs a control system

Beech Hollow Sanitary Landfill

PTI Application: 06-07070

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Facility ID: 0640020059

Emissions Unit ID:P901

consisting of other than flare technology, it shall be necessary to modify this permit.

- 2.i** [40 CFR 60.18(c)(1)]
There shall be no visible emissions from any open flare except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- 2.j** [40 CFR 60.752(b)(2)(ii)(A)]
The active collection system shall satisfy the following requirements:
- 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.k** [40 CFR 60.18(c) through (f)]
Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
- The collected gas shall be vented to an open flare designed and operated in accordance with 40 CFR 60.18(c) through (f) 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. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
 - iii. The permittee shall comply with either the requirements in paragraphs (a) and (b) or the requirements in paragraph (c) below:
 - (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 calculated using the following equation:

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

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 degrees C;

C_i = concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or D1946-90; and

H_i = net heat of combustion of sample component i , kcal/g mole at 25 degrees C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.

- (b) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity (determined by dividing the volumetric flowrate in units of standard temperature and pressure, as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate, by the unobstructed (free) cross sectional area of the flare tip) of less than 18.3 m/sec. (60 ft/sec), except:
- (i) steam-assisted and nonassisted flares designed for and operated with an exit velocity 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 flares designed for and operated with an exit velocity less than the velocity, V_{max} , and less than 122 m/sec (400 ft/sec) are allowed; where V_{max} is determined using the following equation:

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

where:

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

28.8 = constant;

31.7 = constant; and

Ht = the net heating value of the sample as determined in section A.I.2.k.iii.(a) above.

Air-assisted flares shall be designed for and operated with an exit velocity less than the velocity, V_{max} , as determined by the following equation:

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

where:

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

8.706 = constant;

0.7084 = constant; and

Ht = the net heating value of the sample as determined in section A.I.2.k.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, V_{max} , as determined by the following equation:

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

where:

V_{max} = 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 ASTM Method D1946-77.

The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

- 2.1** [40 CFR 60.752(b)(2)(v)]
The collection and control system may be capped or removed provided that all of the following conditions are met:
- i. The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 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 50 megagrams per year (55 TPY) on 3 successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
- 2.m** If this emissions unit is permanently closed, a closure notification, as provided for in 40 CFR Part 60.757(d), shall be submitted to the Ohio EPA, Southeast District Office.
- 2.n** The permittee shall employ best available control measures on all landfill operations associated with the load-in and load-out of MSW for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to watering of dusty materials, either prior to dumping or during dumping, and good operating practices to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.o** [40 CFR 63.1945(b)]
The permittee shall comply with the requirements in 40 CFR Part 63, Subpart AAAAA, National Emissions Standards for Hazardous Air Pollutants; Municipal Solid Waste Landfills by January 16, 2004.
- 2.p** This facility is located in Jackson County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.
- 2.q** [40 CFR 63.1955(a)(1)]
The permittee must fulfill the requirements of 40 CFR Part 60, Subpart WWW.
- 2.r** The facility construction activities that are covered by this permit and subject to the above-mentioned requirements are listed below:

landfill overburden excavation/removal and material handling
landfill subbase aggregate material handling, including construction storage piles
landfill construction fill excavation and material handling
landfill liner clay excavation and material handling
landfill daily cover excavation and material handling

- 2.s** The permittee shall employ best available control measures on all construction areas, including storage piles, for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the construction areas, including storage piles, with water spray at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.t** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area or construction area, including storage piles, that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.u** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.v** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.w** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

II. Operational Restrictions

1. There shall be no open burning, in violation of OAC Chapter 3745-19, at this facility.
2. [40 CFR 60.753(a)]
The permittee shall operate the collection system such that gas is collected from each area, cell, or group of cells in the municipal solid waste (MSW) landfill in which solid waste has been in place for:

- a. 5 years or more if active; or
 - b. 2 years or more if closed or at final grade.
3. [40 CFR 60.753(b)]
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 owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1);
 - b. Use of a geomembrane or synthetic cover. The permittee shall develop acceptable pressure limits in the design plan; and
 - c. A decommissioned well. A well may experience a static positive pressure after the shutdown to accommodate for declining flows. All design changes shall be approved by the Administrator.
4. [40 CFR 60.753(c)]
The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator 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.
5. [40 CFR 60.753(d)]
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. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and 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. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
6. [40 CFR 60.753(e)]
The permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). 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 1 hour.

7. [40 CFR 60.753(f)]
The permittee shall operate the control or treatment system at all times when the collected gas is routed to the system.
8. [40 CFR 60.753(g)]
If monitoring demonstrates that the operational requirements in sections A.II.3, A.II.4, or A.II.5 of this section are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c) of this subpart. If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in this section.
9. [40 CFR 60.18(e)]
Flares used to comply with provisions of Subpart WWW shall be operated at all times when emissions may be vented to them.
10. [40 CFR 60.18(d)]
Owners or operators of flares used to comply with the provisions of Subpart WWW shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
11. [40 CFR 60.755(e)]
The provisions of Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

III. Monitoring and/or Recordkeeping Requirements

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

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 records.
2. The permittee shall maintain records of the following information:
 - a. the waste shipment record form for each shipment of asbestos-containing materials; and

- b. the location, depth and area, and quantity in cubic yards of all asbestos-containing materials within the disposal site, on a map or a diagram of the disposal area.
3. The permittee shall perform daily checks, when the weather conditions allow, for any visible fugitive particulate emissions from asbestos-containing materials during on-site transportation, transfer, unloading, deposition or compacting operations. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.
4. [40 CFR 60.758(a)]

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), 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 paper copy or electronic formats are acceptable.
5. The initial calculated nonmethane organic compound (NMOC) emission rate for this emissions unit was less than 50 megagrams (55 tons) per year. Pursuant to 40 CFR Part 60.757(b)(1)(ii), the permittee may submit a 5-year period NMOC emissions report in lieu of the annual recalculation of the NMOC emissions. The NMOC emission rate shall be calculated using either the equation provided in paragraph (a)(1)(i) or the equation provided in paragraph (a)(1)(ii) of 40 CFR Part 60.754, and the procedures specified in paragraph (a)(2),(a)(3), and (a)(4) of 40 CFR Part 60.754.
6. When this facility becomes a controlled landfill, the permittee shall comply with the monitoring requirements specified in 40 CFR 60.756(a) through 60.756(f), as appropriate, and the record keeping requirements specified in 40 CFR 60.758(b) through 60.758(e).
7. [40 CFR 60.756(a)]

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

 - a. Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3);

- b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and
 - c. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5).
8. [40 CFR 60.756(c)]
Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare 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.
 - b. A device that records flow to or bypass of the flare. The owner or operator shall either:
 - i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
 - ii. 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.
9. [40 CFR 60.756(f)]
Except as provided in 40 CFR 60.752(b)(2)(i)(B), Each owner or operator seeking to demonstrate compliance with 40 CFR 60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.
10. [40 CFR 60.758(b)(1) and (b)(4)]
Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records, for the life of the control equipment, of the data listed in 5.a. and 5.b. below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
- a. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(ii):

- i. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.
 - ii. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1).
 - b. Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.
11. [40 CFR 60.758(c)(2) and (c)(4)]

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

 - a. Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
 - b. Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
12. [40 CFR 60.758(d)]

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep 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.

 - a. Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b).

- b. Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).
13. [40 CFR 60.758(e)]

Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
14. [40 CFR 63.1960]

The permittee must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.
15. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions resulting from any landfill operations (such as wastes unloading, covering, excavation, wind erosion, all construction areas and all construction storage piles). The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible fugitive particulate emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were

taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

16. The permittee shall maintain a daily operations log for each waste dumping/placement area and all construction areas and all construction storage piles which lists any watering activity employed to minimize or eliminate visible emissions of fugitive dust, and the time, the location, and the amount of water employed, in gallons.
17. No inspection shall be necessary for wind erosion from the surface of a MSW landfill cell or construction areas/construction storage piles when the cell or area is covered with snow and/or ice and for any landfill activity 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.
18. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in of a MSW landfill cell, wind erosion from the surface of a MSW landfill cell and construction area activities. The inspections shall be performed during representative, normal landfill operating conditions.
19. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from landfill surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 12.d. shall be kept separately for (i) the load-in operations, (ii) the landfill surfaces (wind erosion), and (iii) all construction areas and all construction storage piles and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

20. The permittee shall comply with Ohio EPA's Air Toxics Policy and conduct air toxics screening modeling for HCl as part of the collection system and control plan.

21. [40 CFR 63.1990]
[40 CFR 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.

IV. Reporting Requirements

1. [40 CFR 60.757(d)]
Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).
2. [40 CFR 60.757(e)]
Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.
 - a. the equipment removal report shall contain all of the following items:
 - i. a copy of the closure report submitted in accordance with 40 CFR 60.757(d);
 - ii. a copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
 - iii. dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
 - b. The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.
3. [40 CFR 60.757(f)]
Each owner or operator of a landfill seeking to comply with 40 CFR 60.752(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in sections a. through f. below. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758(c).
 - a. value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d);

- b. 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. description and duration of all periods when the control device was not operating for a period exceeding 1 hour and 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. the date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of 40 CFR 60.755.
4. 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; and
 - b. a list of all asbestos-containing waste consignments received including: the date received, the name of the waste generator, the name and location of the facility where the load originated, the quantity of asbestos, and any discrepancy or non-conformity discovered.

These quarterly reports shall be submitted to the Ohio EPA Southeast District Office no later than January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.

5. The permittee shall submit quarterly reports that (a) identify all days during which any visible particulate emissions were observed from the asbestos-containing materials during on-site transportation, transfer, unloading, deposition or compacting operations and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These quarterly reports shall be submitted to the Ohio EPA Southeast District Office no later than January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.
6. As soon as possible and no longer 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.
7. Upon discovery of a discrepancy between the quantity of asbestos 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 Ohio EPA Southeast District Office. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

8. The permittee shall submit, upon closure of the facility, a copy of the records of the asbestos waste disposal locations and quantities.
9. The permittee shall notify the Ohio EPA Southeast District Office, in writing, at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. The following information shall be included in the notice:
 - a. scheduled starting and completion dates;
 - b. reason for disturbing the waste;
 - c. procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material (if deemed necessary, the Director may require changes in the proposed emission control procedures); and
 - d. location of any temporary storage site and the final disposal site.
10. The permittee shall notify the Ohio EPA Southeast District Office of any load of asbestos-containing material which is rejected, or any non-conforming load disposed of in accordance with the "Asbestos Spill Contingency Plan." Notification shall be provided as soon as possible by a phone contact, followed in writing by the next working day. The written notification shall provide a copy of the waste shipment record ("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 Ohio EPA is informed and provided the opportunity to inspect.
11. Except as provided for in section A.IV.8 below, the permittee shall submit annual NMOC emission rate reports as required by 40 CFR Part 60.757(b)(1). The reports shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR Part 60.754(a) or (b), as applicable, and all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. Upon installation of a collection and control system, reports of annual NMOC emissions are no longer required as provided in 40 CFR Part 60.757 (b)(3).

12. If the estimated NMOC emission rate, as reported in the annual report to the Ohio EPA Southeast District Office, is less than 50 megagrams (55 tons) per year in each of the next 5 consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Ohio EPA Southeast District Office. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Ohio EPA Southeast District Office. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
13. The permittee shall submit quarterly written reports which (a) identify all days during which any visible fugitive particulate emissions were observed from non-asbestos operations involving this emissions unit (such as wastes unloading, covering, excavation, wind erosion and construction activity areas and construction storage piles) and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office no later than January 31, April 30, July 31 and October 31 and shall cover the previous calendar quarters.
14. [40 CFR 63.1965]
A deviation is defined in Section 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.
 - a. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of Subpart WWW are exceeded.
 - b. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
 - c. A deviation occurs when a SSM plan is not developed, implemented, or maintained on site.
15. [40 CFR 63.1980]
 - a. Keep records and reports as specified in 40 CFR Part 60, Subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR Part 60, Subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.
 - b. You must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of subpart AAAA of Part 63. Applicable

records in the general provisions include items such as SSM plans and the SSM plan reports.

16. [40 CFR 63.1990]
[40 CFR 63.10(d)(5)] 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.

V. Testing Requirements

1. [40 CFR 60.755(a)]
Except as provided in 40 CFR 60.752(b)(2)(i)(B), the specified methods in paragraphs 1.a. through 1.f. of this section shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii).
- a. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 40 CFR 60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.
- i. For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$

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, year⁻¹;

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^{-kc} = 1).

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

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QM = the summation of $2 \times k \times L_o \times M_i \times (e^{-kt \times i})$ for $i=1$ through $i=n$

where:

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

k=methane generation rate constant, year⁻¹;

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

Mi=mass of solid waste in the ith section, megagrams; and

ti=age of the ith section, 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 1.a.i. and 1.a.ii. of this section. 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 1.a.i. or 1.a.ii. or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.
- b. For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.
- c. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.
- d. Owners or operators are not required to expand the system as required in paragraph 1.c. of this section during the first 180 days after gas collection system startup.
- e. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance

within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

- f. An owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to the Administrator as specified in 40 CFR 60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.
2. [40 CFR 60.755(c)]

The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d).

 - a. After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph d. of this section.
 - 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 this part, 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 in paragraphs d.i. through d.v. of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d).
 - 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 re-monitored within 10 calendar days of detecting the exceedance.

- iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph d.v. of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph d.v. 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 re-monitoring specified in paragraph d.ii. or d.iii. of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring 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 re-monitoring shows an exceedance, the actions specified in paragraph d.iii. or d.v. shall be taken.
- v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, 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 Administrator for approval.
- e. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

3. [40 CFR 60.755(d)]

Each owner or operator seeking to comply with the provisions in this section shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

- a. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC.
- b. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
- c. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.

- d. The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.
4. [40 CFR 60.755(e)]

The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.
5. [40 CFR 60.755(b)]

For purposes of compliance with 40 CFR 60.753(a), each owner or operator of a controlled landfill 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.
6. [40 CFR 60.753(c)]

The specified methods in paragraphs 4.a. and 4.b. below shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.753(c).

 - a. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i).
 - b. Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
 - i. the span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
 - ii. a data recorder is not required;
 - iii. only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - iv. a calibration error check is not required; and
 - v. the allowable sample bias, zero drift, and calibration drift are +/-10 percent.
7. The permittee shall determine the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a) until such time as it is determined that the NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

8. Emissions shall not exceed the values shown in Section A.I.2.a which are based on calculations described below. These calculations represent the highest emission rates which could occur based on landfill gas emission rates predicted by USEPA's Landfill estimation program (LANDGEM) and AP-42 emission factors. Control equipment has not yet been selected, therefore allowables are based on the greatest emission rate from flare controls. Since the allowable emission rates are theoretical maximums, no monitoring, recordkeeping or reporting is necessary until a control technology is implemented.

Emissions predicted by USEPA's Landfill estimation model were based on proposed landfill capacity (24,600,000 Mg) divided equally at the maximum rate of 827,820 Mg per year (2500 tpd) after December 31, 2001 wastes in place quantity of 1,311,343 Mg. The maximum gas generation predicted by the LANDGEM model was used with AP-42 emission factors for flares to calculate the maximum allowable emissions rates.

- a. Emission Limitation:

Emissions of non-methane organic compounds (NMOC) shall not exceed 91.9 TPY

Applicable Compliance Method:

NMOC: Emissions were predicted by USEPA's LANDGEM model. The highest annual emission rate would be the third year after emissions exceed 50 Mg per year since NSPS allows 30 months to install collection and controls after that rate is attained.

- b. Emission Limitation:

Emissions of methane (CH₄) shall not exceed 42812 TPY

Applicable Compliance Method:

CH₄: Emissions were predicted by USEPA's LANDGEM model. The highest modeled year was used since methane is not required to be controlled.

- c. Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 36.0 TPY.

Applicable Compliance Method:

VOC : Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations. The highest modeled year was used since VOC is not required to be controlled.

d. Emission Limitation:

Emissions of nitrogen oxide compounds (NO_x) shall not exceed 53.21 TPY.

Applicable Compliance Method:

NO_x: The total volume of CH₄ and NMOC predicted by USEPA's LANDGEM model was calculated to be combusted by a flare based on 1,000 BTU/CF. The flare manufacturers emission factor of 0.06 pound NO_x per mmBTU was used to calculate quantity of NO_x emissions.

e. Emission Limitation:

Emissions of carbon monoxide (CO) shall not exceed 198.52 TPY.

Applicable Compliance Method:

CO: The total volume of CH₄ and NMOC predicted by USEPA's LANDGEM model was calculated to be combusted by a flare based on 1,000 BTU/CF. The total CO is comprised of the CO generated from the flare combustion and CO generated in the landfill estimated by LANDGEM program. The flare manufacturers CO emission factor of 0.2 pound CO per mmBTU was used.

f. Emission Limitation:

Emissions of sulfur dioxide (SO₂) shall not exceed 13.5 TPY.

Applicable Compliance Method:

SO₂ : Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations. The highest modeled year was used since SO₂ is not required to be controlled.

g. Emission Limitation:

Emissions of hydrogen chloride (HCl) shall not exceed 21.12 TPY.

Applicable Compliance Method:

HCl: Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations. The highest modeled year was used since HCl is not required to be controlled.

h. Emission Limitation:

Total emissions of hazardous air pollutants (HAP) shall not exceed 34.06 TPY.

Applicable Compliance Method:

HAPs: Emissions were calculated based on predictions from USEPA's LANDGEM model and AP-42 equations. The highest modeled year was used since HAPs is not required to be controlled.

9. Emission Limitation:

Visible fugitive particulate emissions from non-asbestos operations shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation identified above 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 the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

10. Emission Limitation:

Fugitive particulate emissions (PE) from landfill operations shall not exceed 15.1 tons per year.

Applicable Compliance Method:

If required, compliance shall be demonstrated by employing the emission factor (pounds per ton) derived from the equations in AP-42, Compilation of Air Pollution Emission Factors, Chapter 13.2.4-3 (1/95), for aggregate handling and storage piles:

from Material Handling;

$$E = k(0.0032) [(U/5)^{1.3}]/[(M/2)^{1.4}]$$

where; E = emission factor in (pound [lb]/ton)

k = particle size multiplier (dimensionless) 0.74 for PM and 0.35 for PM₁₀

U = mean wind speed in miles per hour (mph)

M = material moisture content (%)

When k=0.35, U=8.7, M= 15.0 ; E_{PM} = 0.00029 lb/t and E_{PM10} = 0.00014 @ 2500 tpd

$$PM_{MH} = 0.13 \text{ TPY}$$

from the Flare;

$$PM_{\text{Flare}} = 14.90 \text{ TPY}$$

Total PM = 15.03 TPY

11. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the no visible emissions requirement specified in section A.I.2.a 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)(c) of OAC rule 3745-17-03.

12. Emission Limitation:

no visible emissions except for three (3) minutes during any 60-minute period, from construction areas, including construction storage piles

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.

13. Emission Limitation:

Fugitive PE from facility construction activities, including construction storage piles, shall not exceed 94.4 TPY.

Applicable Compliance Method:

Compliance shall be demonstrated by employing the emission factor (pounds per ton) derived from the equations in AP-42, Compilation of Air Pollution Emission Factors, Table 11.9-1 (10/98), for bulldozing and compacting and Chapter 13.2.4 (1/95), for material handling and load-in/ load-out operations.

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VI. Miscellaneous Requirements

None

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P901 - MSW Landfill with Asbestos disposal Chapter 31 Modification (Terms in this permit supersede those identified in PTI# 06-06475, issued November 8, 2001 and PTI # 06-3025 issued August 22, 1994)	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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None