



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL**  
**LOGAN COUNTY**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.  
Center

**Application No: 05-13230**

**DATE: 6/24/2004**

Cherokee Run Landfill  
Randy Traub  
2946 US Route 68 North  
Bellefontaine, OH 433110000

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*

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

CC: USEPA

SWDO

IN

**LOGAN COUNTY**

PUBLIC NOTICE  
ISSUANCE OF DRAFT PERMIT TO INSTALL **05-13230** FOR AN AIR CONTAMINANT SOURCE FOR  
**CHEROKEE RUN LANDFILL**

On 6/24/2004 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Cherokee Run Landfill**, located at **2946 US Route 68 North, Bellefontaine**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 05-13230:

**MSW Landfill to include asbestos disposal, roadways and parking areas, and material handling.**

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

Phil Hinrichs, Ohio EPA, Southwest District Office, 401 East Fifth Street, Dayton, OH 45402-2911  
[(937)285-6357]



**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 05-13230**

Application Number: 05-13230  
APS Premise Number: 0546010137  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Cherokee Run Landfill  
Person to Contact: Randy Traub  
Address: 2946 US Route 68 North  
Bellefontaine, OH 433110000

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**2946 US Route 68 North  
Bellefontaine, Ohio**

Description of proposed emissions unit(s):  
**MSW Landfill to include asbestos disposal, roadways and parking areas, and material handling.**

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

Cherokee Run Landfill

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Issued: To be entered upon final issuance

Facility ID: 0546010137

## 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

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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

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the Permit To Install

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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	305.48
PM10	79.48

12

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## **Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

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

1. National emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills are established within 40 CFR Part 63, Subpart AAAA, § 63.1930. This subpart requires all landfills described in § 63.1935 to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.
2. Pursuant to § 63.1940, an affected source is defined as follows:
  - a. An affected source of this subpart is a MSW landfill, as defined in § 63.1990, that meets the criteria in § 63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.
  - b. A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of Subpart A.
  - c. An affected source of this subpart is existing if it is not new.
3. Based upon the above definition, Cherokee Run Landfill is an existing affected source. Pursuant to § 63.1945(d), "If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in § 63.1955(b) and § 63.1960 through § 63.1980 by the date your landfill is required to install a collection and control system by § 60.752(b)(2), the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later." As such, compliance with this subpart was required by January 13, 2004.
4. Pursuant to § 63.1950, the permittee is no longer required to comply with the requirements of this subpart when it is no longer required to apply controls as specified in 40 CFR § 60.752(b)(2)(v).
5. Pursuant to § 63.1955, the permittee is required to comply with the requirements of 40 CFR Part 60, Subpart WWW. If you are required by 40 CFR § 60.752(b)(2) to install a collection and control system, you must comply with the requirements in § 63.1960 through § 63.1985 and with

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the general provisions of this part specified in table 1 of this subpart. For approval of collection and control systems, which include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, record keeping or reporting provisions, you must follow the procedures in 40 CFR § 60.752(b)(2). If alternatives have already been approved under 40 CFR Part 60 Subpart WWW, these alternatives can be used to comply with this subpart, except that all affected

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sources must comply with the SSM requirements in 40 CFR Part 63, Subpart A as specified in Table 1 of this subpart, and all affected sources must submit compliance reports every 6 months as specified in § 63.1980(a) and (b). These reports include information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

6. Pursuant to § 63.1960, compliance is determined in the same way it is determined for 40 CFR Part 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR § 60.756(b)(1), (c)(1), and (d) of Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR § 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.
7. Pursuant to § 63.1965, a deviation is defined in § 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.
8. Pursuant to § 63.1975, averages are calculated in the same way as they are calculated in 40 CFR Part 60, Subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:
  - a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
  - b. Startups.

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- c. Shutdowns.
- d. Malfunctions.

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9. Pursuant to § 63.1980(a), the permittee shall keep records and reports as specified in 40 CFR Part 60, Subpart WWW, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.
10. Pursuant to § 63.1980(b), the permittee must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.
11. Pursuant to § 63.1985(a), this subpart can be implemented and enforced by the U.S. EPA or Ohio EPA.
12. Pursuant to § 63.1990, terms used in this subpart are defined in the Clean Air Act, 40 CFR Part 60, Subparts A, Cc, and WWW; 40 CFR Part 62, Subpart GGG, and Subpart A of this part, and this section that follows:
  - a. Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
    - i. fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
    - ii. fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
    - iii. fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.
  - b. Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.
  - c. EPA approved State plan means a State plan that EPA has approved based on the requirements in 40 CFR Part 60, Subpart B to implement and enforce 40 CFR Part 60, Subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.
  - d. Federal plan means the EPA plan to implement 40 CFR Part 60, Subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are

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not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR Part 62, Subpart GGG.

- e. Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal

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solid waste landfill may also receive other types of RCRA Subtitle D wastes (see Section 257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

f. Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

13. As stated in § 63.1955 and § 63.1980, you must meet each requirement in the following table that applies to you.

Table 1 of Subpart AAAA of Part 63: Applicability of NESHAP General Provisions to Subpart AAAA		
Part 63 Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part.	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, Part 60 Subpart A.
63.1(b)	Applicability determination for stationary sources.	
63.1(e)	Title V permitting.	
63.2	Definitions.	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR Part 60, Subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources.	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions.	

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63.6(f)	Compliance with nonopacity emission standards.....	Affected sources are already subject to the provisions of paragraphs (f)(1)and (2)(i) through the same provisions Under 40 CFR Part 60, Subpart A.
63.10(b)(2)(i)-(b)(2)(v)	General record keeping requirements.	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event.	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified.	
63.15	Availability of information and confidentiality.	

**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 - Paved and unpaved roadways and parking areas	OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 297.25 tons per year.</p> <p>Particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM<sub>10</sub>) shall not exceed 75.44 tons per year.</p> <p>There shall be no visible PE from any paved roadway or parking area, except for a period of time not to exceed 1 minute during any 60-minute observation period.</p> <p>There shall be no visible PE from any unpaved roadway or parking area, except for a period of time not to exceed 3 minutes during any 60-minute observation period.</p> <p>Employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See A.I.2.c, d, e, f, g, h, i, and j.).</p> <p>none (See A.I.2.k.)</p>
	OAC rules 3745-17-07(B) and 3745-17-08(B)	

**Issued: To be entered upon final issuance****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:

Roadway 1

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

Roadway 2

Roadway 3

Roadway 4

- 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. The permittee shall employ water flushing and mechanical sweeping for the paved roadways and parking areas at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee will improve the surface of any unpaved shoulders as necessary 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. The permittee shall employ water as well as improve the surface of any unpaved roadway and parking area as necessary 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

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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 emissions unit is not located in an "Appendix A" area as indicated in OAC rule 3745-17-08. Therefore, the emissions unit is not subject to the RACM requirements established in OAC rule 3745-17-08(B) and the visible emission limitations specified in OAC rule 3745-17-07(B).

**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 paved and unpaved roadways and 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

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conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from Ohio EPA, Southwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain daily records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. Reconfiguration of the roadways and parkways areas and variations in traffic patterns at this facility may not be a modification under OAC rule 3745-31-01 as long as emissions are equal to or less than the established PTI limitations. If the change is determined to be a modification then the permittee must apply for and obtain a permit to install prior to the installation of the change

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly 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. These reports are due by the dates as specified in Part I - General Terms and Condition A.1. of this permit.

## **V. Testing Requirements**

1. Emission Limitation:

There shall be no visible PE from any paved roadway or parking area, except for a period of time not to exceed 1 minute during any 60-minute observation period.

There shall be no visible PE from any unpaved roadway or parking area, except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

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

2. Emission Limitation:

Particulate emissions (PE) shall not exceed 297.25 tons per year.

Particulate matter with an aerodynamic diameter equal or less than 10 microns (PM<sub>10</sub>) shall not exceed 75.44 tons per year.

Applicable Compliance Method:

Compliance may be determined by summing each of the paved and unpaved roadway and parking segments using the following procedure for each segment: multiply the emission factor, Eext, by the total annual vehicle miles traveled. The emission factor, Eext, shall be determined by the following equation found in AP-42 section 13.2.1 (equations 1 and 2) for Paved Roads (dated December 2003), and 13.2.2 (equations 1a and 2) for Unpaved Roads (dated December 2003).

$$\text{Paved Roads: } E = k(sL/2)^{0.65} (W/3)^{1.5} - C$$

$$\text{Eext} = E(1-P/4N)$$

where,

E = particulate emission factor (lb/VMT)

Eext = particulate emission factor (lb/VMT) extrapolated for rainfall mitigation

k = constant - 0.082 for PE and 0.016 for PM<sub>10</sub> (particle size multiplier for lb/VMT)

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sL = road surface silt loading (lb/mi)

W = mean vehicle weight in tons

C = emission factor for 1980's vehicle fleet, 0.00047 for PE and PM10

Eext = annual average emission factor, lb/VMT

P = number of days with at least 0.01 inches of precipitation per year = 120 days for central Ohio, Figure 13.2.1-2, AP-42, section 13.2.1)

N = number of days in the averaging period = 365 days/year

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$$\text{Unpaved Roadways: } E = k(s/12)^a(W/3)^b$$
$$E_{\text{ext}} = E[(365 - p)/365]$$

where,

E = size-specific particulate emission factor (lb/VMT)

k = constant - 4.9 for PE and 1.5 for PM<sub>10</sub> (particle size multiplier for pounds/VMT)

s = surface material silt content

W = mean vehicle weight in tons

a = constant - 0.7 for PE and 0.9 for PM<sub>10</sub>

b = constant - 0.45 for both PE and PM<sub>10</sub>

E<sub>ext</sub> = emission factor extrapolated for natural mitigation, lb/VMT

p = number of days with at least 0.01 inches of precipitation per year = 120 days for central Ohio, Figure 13.2.2-1, AP-42, section 13.2.2

## **VI. Miscellaneous Requirements**

None

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**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 - Paved and unpaved roadways and parking areas		

**2. Additional Terms and Conditions**

**2.a**

**II. Operational Restrictions**

none

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

none

**IV. Reporting Requirements**

none

**V. Testing Requirements**

none

**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>
F002 - Material handling	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 8.23 tons per year.
		Particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM10) shall not exceed 4.04 tons per year.
		Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average, for all material handling operations.
	OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B)	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see terms and conditions A.2.a through d.)
		None (See A.I.2.e)

**2. Additional Terms and Conditions**

- 2.a The material handling operations that are covered by this permit and subject to the above-mentioned requirements include all operations associated with the handling of the following materials: final and intermediate cover soils, clay liner, and aggregates.
- 2.b The permittee shall employ best available control measures for the above-identified material handling operations 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 minimize drop heights and employ water to suppress dust as needed. Nothing in this paragraph shall prohibit the permittee from

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employing other control measures to ensure compliance.

- 2.c For each material handling operation the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- 2.d Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.e This emissions unit is not located in an "Appendix A" area as indicated in OAC rule 3745-17-08. Therefore, the emissions unit is not subject to the RACM requirements established in OAC rule 3745-17-08(B) and the visible emission limitations specified in OAC rule 3745-17-07(B).

**II. Operational Restrictions**

None

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

1. Except as otherwise provided in this section, for material handling operations the permittee shall perform daily visible inspections of such operations during each day of operation.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from Ohio EPA, Southwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain daily records of the following information:
  - a. the date and reason any required inspection was not performed;

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- 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.

The information in 4.d. shall be kept separately for each material handling operation identified above, 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; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

These reports are due by the dates as specified in Part I - General Terms and Condition A.1. of this permit.

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

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

- 1. Emissions Limitation:  
 PE shall not exceed 8.23 tons per year.  
 PM10 shall not exceed 4.04 tons per year.

Applicable Compliance Method:

Compliance may be determined by calculating emissions from each type of material handled and then summing each of the calculated emissions as follows:

First, determine the emissions factor "E" for each material handled and for each PE and PM10 emissions. The emissions factor "E" is determined by using equation (1) in AP-42 (01/1995. Section 13.2.4, Aggregate Handling and Storage Piles. Compilation of Air Pollution Emission Factors, Volume 1: *Stationary Point and Area Sources*, Fifth Edition.) Second, the emission factor "E" is then multiplied by the mass of material handled per year for each material. Third, the resulting pound per year emission rate for each PE and PM10 emissions is converted to tons per year, i.e., multiply by 1 ton/2000 lbs. Finally, the calculated, annual PE and PM10 emissions are each summarized for all materials handled.

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

where,

E = emission factor

k = particle size multiplier, 0.74 for PE, 0.35 for PM10

U = mean wind speed, miles per hour, 11 mph

M = material moisture content (%), aggregate 0.7%, liner clay 10%, cover soil 12%  
(Table 13.2.4-1)

$$\text{TPY} = \sum_{i=1}^n (E_i)(T_i)(1 \text{ ton}/2000 \text{ lbs})$$

where,

TPY = Annual TPY for PE or PM10

E<sub>i</sub> = the emission factor for each type of material handled for either PE or PM10

T<sub>i</sub> = the annual tons of material handled for each type of material

## **VI. Miscellaneous Requirements**

None

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PTI A

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**Issued: To be entered upon final issuance****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>
F002 - Material handling		

**2. Additional Terms and Conditions****2.a****II. Operational Restrictions**

none

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

none

**IV. Reporting Requirements**

none

**V. Testing Requirements**

none

**VI. Miscellaneous Requirements**

none

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**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 collection and control system, which may accept regulated asbestos-containing materials	OAC rule 3745-31-05(A)(5)	Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average, for all waste materials, except asbestos-containing waste materials.
	OAC rule 3745-17-07(B) and OAC rule 3745-17-08	See A.I.2.a thru c.
	40 CFR, Part 60, Subpart WWW	None (See A.I.2.c)
	40 CFR Part 63, Subpart AAAA	See A.I.2.d through m.
	OAC Chapter 3745-20 and the NESHAP (40 CFR Part 61, Subparts A and M)	See A.I.2.n and Part II.A.2 through 16.
		See A.I.2.o through x.

**2. Additional Terms and Conditions**

- 2.a The permittee shall ensure that solid wastes are deposited, spread, and compacted in such a manner as to minimize or prevent visible emissions of dust. All truckloads of solid waste shall be unloaded in a manner which will minimize the drop height of the solid wastes. Any dusty materials or wastes likely to become airborne shall be watered as necessary prior to or during dumping operations in order to minimize or eliminate visible emissions

Emissions Unit ID: P901

of fugitive dust. Watering shall be conducted in such a manner as to avoid the pooling of liquids and runoff. No dusty material shall be dumped during periods of high wind speed, unless the material has been treated to prevent fugitive dust emissions from becoming airborne.

- 2.b** The control measures identified above shall be for load-in of municipal solid waste if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements.
- 2.c** This emissions unit is not located in an "Appendix A" area as indicated in OAC rule 3745-17-08. Therefore, the emissions unit is not subject to the reasonably available control measures (RACM) requirements established in OAC rule 3745-17-08(B) and the visible emission limitations specified in OAC rule 3745-17-07(B)
- 2.d** The calculated NMOC emission rate for this facility is greater than 50 megagrams per year (Mg/yr), therefore the permittee shall operate a collection and control system that captures the gas generated within the landfill as required below.
- i. An active collection system shall:
    - (a) 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;
    - (b) 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;
    - (c) collect gas at a sufficient extraction rate; and
    - (d) be designed to minimize off-site migration of subsurface gas.
  - ii. A passive collection system shall:
    - (a) comply with the provisions specified in A.I.2.d.i.; and
    - (b) be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under 40 CFR 258.40.
- 2.e** The permittee shall route all the collected gas to a control system that complies with the requirements in A.I.2.d.i or A.I.2.d.ii:
- i. An open flare shall be designed and operated in accordance with the general control device requirements in 40 CFR 60.18:

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- (a) The flare shall be designed and operated with no visible emissions as determined by the Method 22 of Appendix A of 40 CFR, Part 60, except for a periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (b) 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 flame.
- (c) The permittee has the choice of adhering to either the heat content specifications in condition d. below and the maximum tip velocity specifications in condition e. below, or adhering to the requirements in condition f. below.
- (d) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_t = K \times (\text{summation of } i \text{ from } 1 \text{ to } n \text{ for } C_i H_i)$$

where:

$K = \text{constant}, 1.740 \times 10^{-7} [(1/\text{ppm})(\text{g mole}/\text{scm})(\text{MJ}/\text{Kcal})]$  where the standard temperature for (g mole/scm) is 20 degree Celsius;

$H_t = \text{Net heating value of the sample, MJ}/\text{scm}$ ; where the net enthalpy per mole of off gas is based on combustion at 25 degree Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degree Celsius;

$C_i = \text{Concentration of sample component } i \text{ in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in Sec. 60.17); and}$

$H_i = \text{Net heat of combustion of sample component } i, \text{ kcal}/\text{g mole at 25 degree Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in Sec. 60.17) if published values are not available or cannot be calculated}$

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- (e) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, (as determined by dividing the volumetric flow rate (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,) less than 18.3 m/sec (60 ft/sec), except as provided in (e)(ii) and (e)(iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by dividing the volumetric flow rate (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, 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).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by dividing the volumetric flow rate (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, less than the velocity,  $V_{max}$ , as determined by the equation below, and less than 122 m/sec (400 ft/sec) are allowed.

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

where:

$V_{max}$  = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

Ht = The net heating value as determined in paragraph (d) above.

- (f) Flare(s) 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:

$$V_{max} = (XH_2 - K_1) * K_2$$

where:

$V_{max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-percent hydrogen.

$K_2$  = Constant, 3.9(m/sec)/volume-percent hydrogen.

$XH_2$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials

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(ASTM) Method D1946-77. (Incorporated by reference as specified in Sec. 60.17).

The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (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.

- ii. The control system shall be designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight-percent or reduce the outlet NMOC concentration to less than 20 parts per million (ppm) by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or ppm by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in OAC rule 3745-76-09(D).
- 2.f** If the permittee seeks to demonstrate compliance with A.I.2.d.i.(d) through the use of a collection system not conforming to the specifications provided in A.I.2.k through A.I.2.m, the permittee shall provide information satisfactory to the Director to demonstrate that off-site migration is being controlled.
- 2.g** The permittee shall place each well or design component as specified in the approved design plan. 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 5 years or more if active; or 2 years or more if closed or at final grade.
- 2.h** For compliance with the surface methane operational standard as provided in A.II.3, any reading of 500 parts per million (ppm) or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of A.II.3.
- 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.

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- iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and 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 v. shall be taken, and no further monitoring of that location is required until the action specified in 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 ii. or iii. shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in iii. or v. shall be taken.
  - v. For any location where the monitored methane concentration equals or exceeds 500 ppm 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.
- 2.h** For compliance with the surface methane operational standard as provided in A.II.3, the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.
- 2.j** The provisions of this permit under the authority of 40 CFR, Part 60, 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.
- 2.k** The permittee shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Director:
- i. The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.
  - ii. The sufficient density of gas collection devices determined in A.I.2.1.i shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

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- 2.1** The placement of gas collection devices shall control all gas producing areas, except as provided by i and ii below:
- i. Any segregated area of non-degradable material may be excluded from collection if documented as provided under A.III.15. The documentation shall provide the nature, date of deposition, location and amount of non-degradable material deposited in the area, and shall be provided to the Administrator and Director upon request.
  - ii. Any non-productive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1% of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator and Director upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill.

Emissions from each section shall be computed using the following equation:

$$Q_i = 2 \times k \times L_o \times M_i \times (e^{-k t_i}) \times (C_{nmoc}) \times (3.6 \times 10^{-9})$$

where:

$Q_i$  = NMOC emission rate from the  $i$  th section, in megagrams per year

$k$  = methane generation rate constant, in year<sup>-1</sup>

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

$M_i$  = mass of the degradable solid waste in the  $i$  th section, in megagram

$t_i$  = age of the solid waste in the  $i$  th section, in years

$C_{nmoc}$  = concentration of nonmethane organic compounds, in parts per million by volume  
 $3.6 \times 10^{-9}$  = conversion factor

- iii. The values for  $k$ ,  $L_o$ , and  $C_{nmoc}$  determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence. If field testing has not been performed, the default values for  $k$ ,  $L_o$  and  $C_{nmoc}$  are provided below:

$k^* = 0.05$  per year

$L_o = 170$  cubic meters per megagram

$C_{nmoc} = 4,000$  parts per million by volume as hexane

\* For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the  $k$  value to be used is 0.02 per year.

- 2.m** When the permittee constructs new gas collection devices, the permittee shall use the

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following equipment or procedures:

- i. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.
  - ii. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.
  - iii. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.
- 2.n** The requirements of 40 CFR, Part 63, Subpart AAAA also include compliance with the requirements of 40 CFR, Part 60, Subpart WWW.
- 2.o** There shall be no visible emissions from asbestos-containing materials during on-site transportation, transfer, unloading, deposition or compacting operations.
- 2.p** 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 record.

- 2.q** Deposition and burial operations shall be conducted in a careful manner that prevents asbestos-containing waste materials from being broken up or dispersed before the materials are buried.
- 2.r** 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 21 x 14 inch signs so that the signs are displayed in such a manner and location that a person can easily read the legend. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend:

DANGER  
 ASBESTOS DUST HAZARD  
 CANCER AND LUNG DISEASE HAZARD  
 Authorized Personnel Only

Notation

2.5 cm (1 inch) Sans Serif, Gothic or Block  
 2.5 cm (1 inch) Sans Serif, Gothic or Block  
 1.9 cm (3/4 inch) 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.s** 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 covered in accordance with the provisions of condition i above.

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- 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 most stringent.
- 2.t 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 emission 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.u The permittee shall have emission control equipment 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 equipment is in a ready-to-use condition, and in an appropriate location for use.
- 2.v The permittee shall require that all waste shipments received from NESHAP regulated facilities as defined in 40 CFR 61.141, be accompanied by a Waste Shipment Record as described in 40 CFR 61.150(d)(1). Shipments less than one cubic yard generated by residential sources may be exempted. The waste shipment record forms shall be retained at the facility for at least two years, and shall be made available for inspection upon request.

The waste shipment records shall include, but not be limited to, the following information:

- i. the name, address and telephone number of the waste generator;
- ii. the name, address and telephone number of the transporter;
- iii. the quantity of asbestos-containing waste material, in cubic meters (cubic yards);
- iv. the name and telephone number of the disposal site operator;
- v. the presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers;
- vi. the name and physical site location of the disposal site; and

vii. the date of receipt.

- 2.w The permittee shall not accept any load of friable asbestos-containing waste material for disposal unless it has been labeled in accordance with the requirements below:

Each container of friable asbestos-containing waste material shall be labeled in accordance with the requirements of the NESHAP at 40 CFR Part 61, Subpart M; or the OAC rule 3745-20-05; or the Occupational Safety and Health Administration; or the Department of Transportation or any subsequent revision to the preceding rule; and shall contain the following information:

DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD

R.Q. ASBESTOS, CLASS 9  
NA 2212, III

Inspection of incoming loads of asbestos-containing material for compliance with proper labeling requirements may occur at the working face of the landfill.

- 2.x All asbestos-containing waste materials shall be received in sealed, approved, leak-tight waste disposal containers in accordance with condition i or in approved alternative disposal containers in accordance with conditions ii, iii, or iv below:
- i. Asbestos-containing waste material shall be sealed in plastic bags having a thickness of at least 0.006 inch (six-mils). A second clean, leak tight plastic bag having a thickness of at least 0.006 inch (six-mils) shall fully contain the first bag.
  - ii. Whenever necessary to prevent any asbestos-containing waste material from penetrating a container, the material shall be sealed into a combination of 0.006 inch (six-mils) plastic bag and leak-tight steel, plastic, or fiber drums, or reinforced disposal box, leak-tight polypropylene woven fabric bag, or similar suitable and durable container. Drums shall be fitted with a matching lid and lock-rims, and boxes shall be banded and sealed with reinforced tape or in accordance with manufacturer's recommendations.
  - iii. Non-friable waste materials which have the potential to become friable during handling or disposal operations, and components coated with, covered or containing friable asbestos materials shall be wrapped in no less than 0.012 inch (twelve-mils) of leak tight plastic, or at least 0.01 inch (ten-mils) of leak tight polypropylene fabric. This facility shall not accept wrapped pipes or components for disposal, unless a system for unloading and disposing of the waste without causing emissions of asbestos can be assured.

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- iv. Alternative leak-tight containers or disposal systems for asbestos-containing materials may be approved by Ohio EPA for special utility. The permittee is authorized to accept any alternative container or load approved in writing by Ohio EPA. Acceptance of any alternative container or load is at the discretion of the landfill and shall be in accordance with the terms and conditions issued in the alternative container or disposal system.

## **II. Operational Restrictions**

1. The permittee of an MSW landfill with a gas collection and control system used to comply with the provisions of A.I.2.e shall operate the collection system with negative pressure at each wellhead except under the following conditions:
  - a. a fire or increased well temperature (The permittee shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in A.IV.2.);
  - b. use of a geomembrane or synthetic cover (The permittee shall develop acceptable pressure limits in the design plan.); or
  - c. a decommissioned well (A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Director.)
2. The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.
  - a. The nitrogen level shall be determined using 40 CFR, Part 60, Appendix A, Method 3C, unless an alternative test method is approved by the Administrator.
  - b. The oxygen level shall be determined by an oxygen meter using 40 CFR, Part 60, Appendix A, Method 3A, unless an alternative test method is approved by the Administrator, 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.
  - v. The allowable sample bias, zero drift, and calibration drift are plus or minus 10 percent.
3. 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 permittee shall conduct surface testing on a quarterly basis 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 permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
  4. The permittee shall operate the gas collection and control system such that all collected gases are vented to a control system designed and operated in compliance with A.I.2.e. 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.
  5. If a combustion device (enclosed flare) is employed pursuant to section A.I.2.e.ii, the average combustion temperature of the combustion device, for any-3 hour block of time when the emissions unit is in operation, shall not be more than 28 degrees Celsius below the average temperature measured during the most recent compliance test that demonstrated the emissions unit was in compliance.
  6. The permittee shall operate the control and/or treatment system at all times when the collected gas is routed to the system.
  7. If monitoring demonstrates that the operational requirements in A.II.1 through A.II.3 are not met, corrective action shall be taken as specified in A.III.4, A.III.5, A.I.2.i, and/or A.I.2.j. If corrective actions are taken as specified, the monitored exceedance is not a violation of the operational requirements.

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

1. Except as otherwise provided in this section, the permittee shall perform daily inspections of all

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

2. The permittee may, upon receipt of written approval from Ohio EPA, Southwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified inspection frequencies would not be considered a minor or significant modification that would be subject to Title V permit modification requirements in paragraph (C)(1) and (C)(3) of OAC rule 3745-77-08.
3. The permittee shall maintain records of the following information:
  - a. the date and reason that 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 for (i) the solid waste unloading operations, (ii) the landfill access roads, and (iii) active landfill working face surface (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall install a sampling port and a thermometer or other temperature measuring device, or an access port for temperature measurements at each wellhead.
  - a. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with A.I.2.d.i(c), the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists,

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action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under A.II.1. 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 Director for approval.

- b. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the permittee shall monitor each well monthly for temperature and nitrogen or oxygen as provided in A.II.2. 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 time line for correcting the exceedance may be submitted to the Director for approval.
5. The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30-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 below:
- a. 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.
  - b. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR, Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.
  - c. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of Appendix A of 40 CFR, Part 60, except that "methane" shall replace all references to VOC.
  - d. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
  - e. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of Appendix A of 40 CFR, Part 60, the instrument evaluation procedures of section 4.4 of Method 21 of Appendix A of 40 CFR, Part 60 shall be used.
  - f. The calibration procedures provided in section 4.2 of Method 21 of Appendix A of 40 CFR, Part 60 shall be followed immediately before commencing a surface monitoring

survey.

6. The permittee shall 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; or, if an enclosed combustor is employed, a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of +/- 1 percent of the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater [a temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts]. If an enclosed combustor is employed, the permittee shall collect and record the following information:
    - i. all 3-hour blocks of time during which the average combustion temperature within the enclosed combustor was more than 28 degrees Celsius below the average temperature measured during the most recent emission testing that demonstrated the emissions unit was in compliance; and
    - ii. a log of the downtime for the capture (collection system), control device, and associated monitoring equipment while the emissions unit was in operation.
  - b. A device that records flow to or bypass of the flare. The permittee shall either:
    - i. 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
7. The permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in this permit. 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.
8. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which includes: 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. These records may be also required by the OEPA, Division of Solid and Infectious Waste Management, and shall satisfy this permit condition.
9. The permittee shall keep up-to-date, readily accessible records for the life of the control

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equipment of the data listed 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. Records shall include:

- a. the maximum expected gas generation flow rate as calculated;
  - b. the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined;
  - c. where the permittee seeks to demonstrate compliance with A.I.2.e.i through use of an open flare, the following records:
    - i. the flare type (i.e., steam-assisted, air-assisted, or nonassisted);
    - ii. all visible emissions readings, heat content determinations;
    - iii. flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18;
    - iv. continuous records of the flare pilot flame or flare flame monitoring; and
    - v. records of all periods of operations during which the pilot flame of the flare flame is absent.
10. The permittee 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 A.III.1 through A.III.3, 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.
  11. The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow (Section A.III.6.b) or records of daily inspections (Sections A.III.1 and A.III.3) of car-seals or lock-and-key configurations used to seal bypass lines.
  12. The permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under A.III.3, and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.
  13. The permittee 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.

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14. The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under A.I.2.g of this permit.
15. The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of nondegradable waste excluded from collection as provided in A.I.2.1.i as well as any nonproductive areas excluded from collection as provided in A.I.2.1.ii.
16. The permittee 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 A.II.1 through A.II.6, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
17. The permittee shall inspect each load of asbestos containing-material delivered to this facility as follows:
  - a. The inspection shall consist of 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 inspector also shall determine whether the waste shipment records (WSR) accompany the consignment and accurately describe the waste material and quantity.
  - b. If on the basis of the inspection, the asbestos-containing 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 notation shall be made on the waste shipment record.
  - c. The owner or on-duty operator shall notify the Ohio EPA of any load of asbestos-containing material which is rejected, or non-conforming in accordance with the Asbestos Spill Contingency Plan. Notification shall be provided as soon as possible by a phone contact, followed in writing the next working day by providing a copy of the waste shipment record, if available, or when waste is not shipped with a WSR, by providing available information on 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 informed and provided the opportunity to inspect.
18. 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 diagram, or a 3D grid log of the disposal area.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following:
  - a. each day of operation during which an inspection was not performed, as required in Section A.III.1., by the required frequency, excluding an inspection which was not performed during 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.

These reports are due by the dates as specified in Part I - General Terms and Condition A.1. of this permit.

2. The permittee shall submit a closure report to the Administrator and Director within 30 days of waste acceptance cessation. The Administrator or Director 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 and Director, no additional wastes may be placed into the landfill without filing a notification of modification. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator or Director may request additional relevant information subsequent to this notice.
3. The permittee shall submit to the Director annual reports of the recorded information in requirements a through f below. For flares, reportable exceedances are defined under A.III.3. The report shall be submitted by January 31 of each year and shall cover the previous calendar year.
  - a. Value and length of time for each exceedance of the applicable parameters monitored under A.III.1.
  - 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 A.III.3.
  - 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 ppm methane concentration as provided in A.II.3 and the concentration recorded at each location for which an exceedance was recorded in the previous month.

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- f. The date of installation and the location of each well or collection system expansion added.
4. The permittee shall submit an equipment removal report to the appropriate Ohio EPA District Office or local air agency 30 days prior to removal or cessation of operation of the control equipment. The equipment removal report shall contain the information specified in 40 CFR Part 60.757(e)(1). The Ohio EPA may request additional information as may be necessary to verify that all of the conditions for removal in 40 CFR Part 60.752(b)(2)(v) have been met.
5. If an enclosed combustor is employed, the permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the enclosed combustor was more than 28 degrees Celsius below the average temperature measured during the most recent emission testing that demonstrated the emissions unit was in compliance.
6. This facility shall prepare and submit quarterly reports summarizing asbestos disposal activities. Each report shall contain the following information:
  - a. the name, address and location of this facility; the calendar period covered by the report; and changes in methods of storage or disposal operations; and
  - b. a list of all asbestos-containing waste consignments received including:
    - i. the date received;
    - ii. the name, address and telephone number of the waste generator;
    - iii. the name and location of the facility where the load originated;
    - iv. the name, address and telephone number of the transporter;
    - v. the quantity of asbestos-containing waste material received; and
    - vi. any discrepancy or non-conformity discovered.

These reports are due by the dates as specified in Part I - General Terms and Condition A.1. of this permit.

7. As soon as possible and no longer than 30 days after receipt of the waste, the permittee shall send

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a copy of the signed waste shipment record to the waste generator.

8. Upon discovery of a discrepancy between the quantity of waste designated on a waste shipment record and the quantity actually received, the permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Ohio EPA. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
9. The permittee shall submit, within 60 days of the facility becoming inactive and ceasing accepting waste, a copy of the records of the asbestos waste disposal locations and quantities to the Ohio EPA.
10. The permittee shall notify the Ohio EPA 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.

## **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. The nitrogen level shall be determined using Method 3C of 40 CFR Part 60, Appendix A, unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i).
  - b. The oxygen level shall be determined by an oxygen meter using Method 3A of 40 CFR Part 60, Appendix A, unless an alternative test method is established as allowed by 40 CFR Part 60.752(b)(2)(i), except that:
    - i. the span shall be set so that the regulatory limit is between 20 and 50% of the span;
    - ii. a data recorder is not required;

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- 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 plus or minus 10%.

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2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 6 months prior to permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with either the NMOC reduction requirement or the outlet NMOC concentration limitation.
  - c. The following test method(s) shall be employed to demonstrate compliance: Method 18, Method 25 or Method 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

3. After the installation of a collection and control system in compliance with 40 CFR Part 60.755, the permittee shall calculate the NMOC emission rate for the purposes of determining when the system can be removed as provided in 40 CFR Part 60.752(b)(2)(v) in accordance with the equation and procedures specified 40 CFR Part 60.754(b), (b)(1), and (b)(2). The permittee may

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

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

- a. Emission Limitation:  
No visible PE, from asbestos containing materials.

Applicable Compliance Method:

Compliance shall be demonstrated by satisfying the requirements specified in Section A.I.1. and A.I.2. Compliance shall also be determined by visible emission evaluations performed in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, 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.

- b. Emission Limitation:  
Visible emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average, from all waste materials, except asbestos-containing materials.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1)(3).

## **VI. Miscellaneous Requirements**

Authority to Enter:

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

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**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 enclosed flare		

**2. Additional Terms and Conditions**

**2.a**

**II. Operational Restrictions**

none

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

none

**IV. Reporting Requirements**

none

**V. Testing Requirements**

none

**VI. Miscellaneous Requirements**

none

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**Issued**

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