



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

10/29/2013

Certified Mail

Mr. David Murphy  
Noble Road Landfill  
10795 Hughes Road  
Cincinnati, OH 45251

Facility ID: 0370000134  
Permit Number: P0115599  
County: Richland

RE: DRAFT AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, Mansfield News-Journal. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*  
Ohio EPA-NWDO



PUBLIC NOTICE  
10/29/2013 Issuance of Draft Air Pollution Title V Permit

Noble Road Landfill  
170 Noble Road East,  
Shiloh, OH 44878

Richland County

FACILITY DESC.: Solid Waste Landfill

PERMIT #: P0115599

PERMIT TYPE: Renewal

PERMIT DESC: TV Permit renewal for roadways and MSW landfill with asbestos disposal.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Andrea Moore, Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402. Ph: (419)352-8461





**Statement of Basis**  
 Noble Road Landfill  
 Permit Number: P0115599  
 Facility ID: 0370000134

## Statement of Basis For Air Pollution Title V Permit

Facility ID:	0370000134
Facility Name:	Noble Road Landfill
Facility Description:	MSW landfill with asbestos disposal.
Facility Address:	170 Noble Road East, Shiloh, OH 44878
Permit #:	P0115599, Renewal
This facility is subject to Title V because it is major for: <input type="checkbox"/> Lead <input type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/> Carbon Monoxide <input type="checkbox"/> Volatile Organic Compounds <input type="checkbox"/> Nitrogen Oxides <input type="checkbox"/> Particulate Matter ≤ 10 microns <input type="checkbox"/> Single Hazardous Air Pollutant <input type="checkbox"/> Combined Hazardous Air Pollutants <input type="checkbox"/> Maximum Available Control Technology Standard(s) <input type="checkbox"/> GHG <input type="checkbox"/> Title IV	

### A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A



Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	N/A
Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.	N/A

**B. Facility-Wide Terms and Conditions**

Term and Condition (paragraph)	Basis		Comments
	SIP (3745- )	Other	
None			

**C. Emissions Unit Terms and Conditions**

<b>Key:</b> EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement Misc = miscellaneous requirements													
EU(s)	Limitation	Basis		ND	OR	M	ENF	R	Rp	ET	St	Misc	Comments
		SIP (3745- )	Other										
F001	27.1 tons PE /yr	31-05		N	N	Y	N	N	Y	N	Y	N	M - Fugitive dust visual inspections daily. Also - employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust



**Statement of Basis**  
 Noble Road Landfill  
 Permit Number: P0115599  
 Facility ID: 0370000134

													ET - None normally required for fugitive particulate emissions from roadways. (Compliance is based on AP-42 emission factors.)
F001	visible emissions restriction *	31-05		N	N	Y	N	N	Y	N	Y	N	* no visible particulate emissions except for one minute during any 60-minute period (for paved roadways) * no visible particulate emissions except for 3 minutes during any 60-minute period (for unpaved roadways) M - Fugitive dust visual inspections twice daily. Also - employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust ET - None normally required for opacity.
F001 P901	N/A	17-08 (B)		Y	N	N	N	N	N	N	N	N	ND - This emissions unit(s) is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
F001 P901	N/A	17-07 (B)		Y	N	N	N	N	N	N	N	N	ND - This emissions unit(s) is exempt from the VE limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
P901	collection and control for NMOC*		40 CFR 60.752	N	Y	Y	N	Y	Y	Y	N	N	* active gas collection system - and flare OR - Various operational requirements established by NSPS Subpart WWW M - Various monitoring requirements established by NSPS Subpart WWW ET - Various testing requirements established by NSPS Subpart WWW.
P901	misc. asbestos waste practices	31-05*		N	Y	Y	N	Y	Y	N	N	N	OR - Various operational requirements. * M - Various monitoring requirements. * ET - None normally required for asbestos. * * requirements based largely on OAC 3745-20-06 and 40 CFR 61.154
P901	5237 tons methane/yr 44.2 tons NMOC/yr	31-05		N	Y	Y	N	Y	Y	N	N	N	M, R, Rp - Compliance with the limit is based on AP-42 emission factors; therefore, it is not necessary to develop monitoring, record keeping and reporting requirements to ensure compliance with this limit.



	fugitive emissions													ET - No emissions testing currently required for fugitive emissions at landfills.
P901	see comments	31-05		N	N	N	N	N	N	N	N	N	N	* emissions limits for flare: 58.0 lbs CO/hr; 254 tons CO/yr 5.86 lbsNOx/hr; 25.7 tons NOx/yr 2.06 lbs SO2/hr; 9.03 tons SO2/yr 1.03 lb NMOC/hr; 4.50 tons NMOC/yr 1.02 lb of HCl/hr; 4.48 tons HCl/yr 2.49 lbs PM10/hr; 10.9 tons PM10/yr M, R, Rp - Compliance with the limit is based on AP-42 emission factors; therefore, it is not necessary to develop monitoring, record keeping and reporting requirements to ensure compliance with this limit. ET - None normally required for a flare.
P901	61.7 tons fugitive PE/yr	31-05		N	N	N	N	N	N	N	N	N	N	M - Fugitive dust visual inspections daily. Also - employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust ET - None normally required for fugitive particulate emissions from landfills. (Compliance is based on AP-42 emission factors.)
P901	visible emissions restriction	31-05		N	N	N	N	N	N	N	N	N	N	Visible fugitive PE shall not exceed 20% opacity as a three minute average from operations not associated with asbestos containing material (ACM)
P901	plan		40 CFR 63.1960	N	Y	N	N	N	N	N	N	N	N	OR - startup, shutdown, and malfunction (SSM) plan
P901	misc.		40 CFR 63.1955 & 1960 & 1965 & 1990	N	N	N	N	N	N	N	N	N	Y	Misc. – Compliance provisions, deviation reporting provisions



**DRAFT**

**Division of Air Pollution Control  
Title V Permit  
for  
Noble Road Landfill**

Facility ID:	0370000134
Permit Number:	P0115599
Permit Type:	Renewal
Issued:	10/29/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





**Division of Air Pollution Control**  
**Title V Permit**  
for  
Noble Road Landfill

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	2
1. Federally Enforceable Standard Terms and Conditions .....	3
2. Monitoring and Related Record Keeping and Reporting Requirements.....	3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance.....	6
4. Risk Management Plans .....	7
5. Title IV Provisions .....	7
6. Severability Clause .....	7
7. General Requirements .....	7
8. Fees.....	8
9. Marketable Permit Programs.....	8
10. Reasonably Anticipated Operating Scenarios .....	9
11. Reopening for Cause .....	9
12. Federal and State Enforceability .....	9
13. Compliance Requirements .....	10
14. Permit Shield .....	11
15. Operational Flexibility.....	11
16. Emergencies .....	12
17. Off-Permit Changes .....	12
18. Compliance Method Requirements .....	12
19. Insignificant Activities or Emissions Levels.....	13
20. Permit to Install Requirement.....	13
21. Air Pollution Nuisance .....	13
22. Permanent Shutdown of an Emissions Unit .....	13
23. Title VI Provisions .....	13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only .....	14
25. Records Retention Requirements Under State Law Only.....	14
26. Inspections and Information Requests .....	14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements.....	15
28. Permit Transfers .....	15



29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations .....	15
30. Submitting Documents Required by this Permit .....	16
B. Facility-Wide Terms and Conditions.....	17
C. Emissions Unit Terms and Conditions .....	19
1. F001, Paved and unpaved roadways and parking areas.....	20
2. P901, Municipal solid waste landfill inc. asbestos disposal.....	25



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134

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

## Authorization

Facility ID: 0370000134  
Facility Description: MSW landfill with asbestos disposal.  
Application Number(s): A0049045  
Permit Number: P0115599  
Permit Description: TV Permit renewal for roadways and MSW landfill with asbestos disposal.  
Permit Type: Renewal  
Issue Date: 10/29/2013  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0105345

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Noble Road Landfill  
170 Noble Road East  
Shiloh, OH 44878

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134  
**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (5) Standard Term and Condition A. 30.

*(Authority for term: ORC 3704.036(A))*

## **2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*



c) The permittee shall submit required reports in the following manner:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

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

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

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

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

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the



probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

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

See A.29 below if no deviations occurred during the quarter.

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

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northwest District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally



enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

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

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

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

### **3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

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



#### **4. Risk Management Plans**

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

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

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

#### **5. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

#### **6. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

#### **7. General Requirements**

- a) 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 except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.



- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
  - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

## **8. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

## **9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*



## **10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

## **11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **12. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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



### 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) 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.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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 Ohio EPA DAPC, Northwest District Office 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:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
  - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms



and conditions with which there has been continuous compliance throughout the year are not separately identified.

- b. The permittee's current compliance status.
  - c. Whether compliance was continuous or intermittent consistent with A.13.d.2.a above.
  - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.
  - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

#### **14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

#### **15. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northwest District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northwest District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*



## **16. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

## **17. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

## **18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*



**19. Insignificant Activities or Emissions Levels**

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

**20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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

**21. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

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

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*

**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:



- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, 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.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine



whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

**27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134

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

### **30. Submitting Documents Required by this Permit**

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134  
**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134

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

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.



**Draft Title V Permit**  
Noble Road Landfill  
**Permit Number:** P0115599  
**Facility ID:** 0370000134  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. F001, Paved and unpaved roadways and parking areas**

**Operations, Property and/or Equipment Description:**

Roadways and Parking Areas

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 03-16250 issued January 27, 2005)	36.4 tons fugitive particulate emissions (PE) /yr  9.19 tons fugitive particulate matter less than 10 microns (PM <sub>10</sub> ) /yr
b.	OAC rule 3745-17-07(B)(1)	See b)(2)j.
c.	OAC rule 3745-17-08(B)(1)	See b)(2)k.
d.	OAC rule 3745-31-05(A)(3) (PTI 03-16250 issued January 27, 2005)  paved roadways and parking areas [see b)(2)a]	no visible PE, except for a period of time not to exceed one minute during any 60-minute observation period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)c, and b)(2)e through b)(2)i.]
e.	OAC rule 3745-31-05(A)(3) (PTI 03-16250 issued January 27, 2005)  unpaved roadways and parking areas [see b)(2)b]	no visible PE, except for a period of time not to exceed three minutes during any 60-minute observation period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)d through b)(2)i.]

(2) Additional Terms and Conditions

a. The paved roadways that are subject to the terms and conditions of this permit are listed below:



paved roadways: all paved roadway segments

paved parking areas: all paved parking areas

- b. The unpaved roadways and parking areas that are subject to the terms and conditions of this permit are listed below:

unpaved roadways: all unpaved roadway segments

unpaved parking areas: all unpaved parking areas

- c. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas with a water truck and mechanical sweepers. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- d. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas by watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.
- e. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- f. 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.
- g. The permittee shall promptly remove, in such a manner as to minimize or prevent re-suspension, 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.



- h. 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.
- i. 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.
- j. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- k. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B)(1).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

paved roadways and parking areas:	minimum inspection frequency:
All	twice daily (and not less than 4 hours apart) during operation

unpaved roadways and parking areas:	minimum inspection frequency:
All	twice daily (and not less than 4 hours apart) during operation

[OAC 3745-77-07(C)(1) and PTI 03-16250]

- (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 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.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

- (3) The permittee shall maintain records of the following information:

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



- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in (3)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.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify the following:
  - 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.

These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):
  - a. Emission Limitation:  
36.4 tons fugitive PE /yr  
9.19 tons fugitive PM<sub>10</sub> /yr

Applicable Compliance Method:

The emission limitation was established by summing the total, uncontrolled emissions from paved and unpaved roadways and parking areas and applying a 95% control efficiency for use of best available control measures.

The uncontrolled emissions were based on the following:

- i. for paved roadways and parking areas, multiply the appropriate emission factor as determined from AP-42, Chapter 13.2.1 (revised 12/03) by the maximum vehicle miles traveled and divide by 2000 lbs/ton; and



- ii. for unpaved roadways and parking areas, multiply the appropriate emission factor as determined from AP-42, Chapter 13.2.2 (revised 12/03) by the maximum vehicle miles traveled and divide by 2000 lbs/ton.

Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the annual limitation will be assumed.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

- b. Emission Limitation:  
no visible PE, except for a period of time not to exceed one minute during any 60-minute observation period for paved roadways and parking areas

Applicable Compliance Method:

Compliance with the visible emission limitation specified 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), as applicable, of OAC rule 3745-17-03.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

- c. Emission Limitation:  
no visible PE, except for a period of time not to exceed three minutes during any 60-minute observation period for unpaved roadways and parking areas

Applicable Compliance Method:

Compliance with the visible emission limitation specified 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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d), as applicable, of OAC rule 3745-17-03.

[OAC 3745-77-07(C)(1) and PTI 03-16250]

- g) Miscellaneous Requirements

- (1) None.



**2. P901, Municipal solid waste landfill inc. asbestos disposal**

**Operations, Property and/or Equipment Description:**

municipal solid waste and asbestos landfill equipped with an active gas collection and control system (open flare)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-08(B)	none [See b)(2)v.]
b.	OAC rule 3745-17-07(B)(1)	none [See b)(2)w.]
c.	40 CFR 60.750 et seq. [NSPS Subpart WWW]	See b)(2)b through b)(2)q.
d.	40 CFR 61.140 et seq. [NESHAP Subpart M]	See b)(2)x.
e.	OAC rule 3745-31-05(A)(3) (PTI 03-17423 issued June 12, 2008)	44.2 tons of fugitive nonmethane organic compounds (NMOC)/year  5240 tons of fugitive methane/year  17.0 tons of fugitive particulate emissions (PE)/year  10.1 tons fugitive particulate matter less than 10 microns (PM <sub>10</sub> ) /yr  Visible fugitive PE shall not exceed 20% opacity as a three-minute average from operations not associated with asbestos-containing material (ACM)  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [See b)(2)r through b)(2)u.]



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-31-05(A)(3) (PTI 03-17423 issued June 12, 2008)	Emissions from the Flare: 58.0 lbs of carbon monoxide (CO)/hour; 254 tons of CO/year  5.86 lbs of nitrogen oxides (NO <sub>x</sub> )/hour; 25.7 tons of NO <sub>x</sub> /year  2.06 lbs of sulfur dioxide (SO <sub>2</sub> )/hour; 9.03 tons of SO <sub>2</sub> /year  1.03 lb of NMOC/hour; 4.50 tons of NMOC/year  1.02 lb of hydrogen chloride (HCl)/hour; 4.48 tons of HCl/year  2.49 lbs of particulate matter less than 10 microns (PM <sub>10</sub> )/hour; 10.9 tons of PM <sub>10</sub> /year (All particulate emissions from the flare are PM <sub>10</sub> )  See c)(8) through c)(14) for requirements and limitations associated with asbestos-containing material (ACM).  See b)(2)a.

(2) Additional Terms and Conditions

- a. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart WWW and 40 CFR Part 63 Subpart AAAA.
- b. Since the calculated NMOC emission rate for this facility is greater than 50 megagrams per year (Mg/yr), the permittee shall operate a collection and control system that captures the gas generated within the landfill as required in either b)(2)c or b)(2)d below.  
[40 CFR 60.752(b)(2)(ii)]
- c. An active collection system shall:
  - i. be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;



- ii. collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active; or 2 years or more if closed or at final grade;
- iii. collect gas at a sufficient extraction rate; and
- iv. be designed to minimize off-site migration of subsurface gas.  
[40 CFR 60.752(b)(2)(ii)(A)]
- d. A passive collection system shall:
  - i. comply with the provisions specified in b)(2)c (as applicable); and
  - ii. 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.  
[40 CFR 60.752(b)(2)(ii)(B)]
- e. The permittee shall route all the collected gas to a control system that complies with either the requirements for flares in b)(2)f, b)(2)g, and b)(2)h, or the requirements for a control device under the provisions in b)(2)i.  
[40 CFR 60.752(b)(2)(iii)]
- f. Flare requirements:
  - i. 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. The observation period for compliance determination is 2 hours and shall be used according to Method 22.
  - ii. 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.
  - iii. 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 40 CFR 60 Appendix A Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.  
[40 CFR 60.752(b)(2)(iii)(A), 40 CFR 60.18]
- g. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

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



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;

$C_i = \text{Concentration of sample component } i \text{ in ppm on a wet basis, as measured for organics by 40 CFR 60 Appendix A Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in 40 CFR 60.17); and}$

$H_i = \text{Net heat of combustion of sample component } i, \text{ kcal}/\text{g mole at 25 degree Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in 40 CFR 60.17) if published values are not available or cannot be calculated. For this test, the net heating value is calculated from the concentration of methane in the landfill gas as measured by 40 CFR 60 Appendix A Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic compounds, hydrogen, and carbon monoxide is not applicable.}$

h. Flare requirements (cont.):

- i. Steam-assisted and non-assisted 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 40 CFR 60 Appendix A 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 h.ii and h.iii below.
- ii. Steam-assisted and non-assisted 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 40 CFR 60 Appendix A 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 non-assisted 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 40 CFR 60 Appendix A 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.



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

Where:

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

28.8 = Constant

31.7 = Constant

$H_t$  = The net heating value as determined in b)(2)g.

- i. In lieu of the requirements for flares in b)(2)f, b)(2)g, and b)(2)h, 40 CFR 60.752(b)(2) provides for the following:
  - i. implement a control system that: 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 40 CFR 60.754(d); or
  - ii. install and operate a flare under the requirements of 40 CFR 60 Subpart WWW as provided for in 40 CFR 60.18(c)(3)(i).

The permittee's Permit to Install (PTI) addresses the installation and operation of a control system utilizing a flare to comply with the requirements under NSPS Subpart WWW [see b)(2)e]. The permittee should be advised that the installation and operation of alternative control systems as provided under 40 CFR 60.752(b)(2)(iii)(B) or routing collected gas to a treatment system as provided under 40 CFR 60.752(b)(2)(iii)(c) may constitute a "modification" as defined in OAC rule 3745-31-01. The permittee would be required to obtain a final PTI modification prior to performing any activity that would constitute a modification as defined above.

[40 CFR 60.752(b)(2)(iii)(B)]

- j. If the permittee seeks to demonstrate compliance with b)(2)c.iv through the use of a collection system not conforming to the specifications provided in b)(2)o through b)(2)q, the permittee shall provide information satisfactory to the Director to demonstrate that off-site migration is being controlled.  
[40 CFR 60.755(a)(6)]
- k. 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.  
[40 CFR 60.755(b)]
- l. For compliance with the surface methane operational standard as provided in c)(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 as specified in b)(2).i through b)(2).v shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of c)(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.
- 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 b)(2).v of this section shall be taken, and no further monitoring of that location is required until the action specified in b)(2).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 i.ii or i.iii of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 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 b)(2).i.iii or i.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.

[40 CFR 60.755(c)(4)]

- m. For compliance with the surface methane operational standard as provided in c)(3), the permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[40 CFR 60.755(c)(5)]

An alternative remedy to the exceedance under b)(2).v, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

[40 CFR 60.755(c)(4)(v)]

- n. 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.

[40 CFR 60.755(e)]

- o. 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 Administrator:

- 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 as determined in o.i above 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.

[40 CFR 60.759(a)(1) and (2)]

- p. The placement of gas collection devices as determined in b)(2)o.i shall control all gas producing areas, except as provided by b)(2)p.i and b)(2)p.ii as follows:

- i. Any segregated area of non-degradable material may be excluded from collection if documented as provided under d)(12). 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:

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

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 meteorological site, the  $k$  value to be used is 0.02 per year.  
[40 CFR 60.759(a)(3), 40 CFR 60.754(a)(1)]

- q. When the permittee constructs new gas collection devices, the permittee shall use the 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.

[40 CFR 60.759(b)]

- r. The landfill fugitive dust operations/sources that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:
  - construction / operation
  - solid waste handling
  - soil handling
  - wind erosion
- s. The permittee shall employ best available control measures for the above landfill fugitive dust operations/sources for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee maintains that the inherent moisture content of the materials involved in fugitive dust operations/sources is at a level which will result in negligible fugitive dust emissions and is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available control measures to ensure compliance.
- t. Best available control measures shall be employed 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 any such operation until further observation confirms that use of the measures is unnecessary.
- u. 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.
- v. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- w. This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- x. The requirements established pursuant to this rule are less stringent or equivalent to the requirements of OAC rule 3745-31-05(A)(3).
- y. Hydrogen Sulfide Emissions Contingency Plan

As part of the Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), Ohio EPA may request the permittee to develop and



implement a hydrogen sulfide emissions contingency plan. If requested, the contingency plan shall meet the requirements detailed in rules developed in response to House Bill (H.B.) 397.

Under H.B. 397 signed by the governor December 22, 2005, Ohio EPA is required to develop rules governing the operation of construction and demolition debris (C&DD) landfills. One part of this bill requires Ohio EPA to require C&DD facilities to develop and implement a contingency plan for the effective action in response to hydrogen sulfide or other gas emissions. However, Ohio EPA believes it may become important for facilities other than C&DD landfills to have in place a contingency plan to deal with potential hazardous emissions. Therefore, as a condition of this permit, if requested, the permittee will be required to develop and implement a hydrogen sulfide / other gas emission contingency plan consistent with the requirements developed in response to H.B. 397.

c) Operational Restrictions

- (1) The permittee of an MSW landfill with a gas collection and control system used to comply with the provisions of b)(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 reports as provided in e)(2).]
  - b. Use of a geomembrane or synthetic cover. (The permittee shall develop acceptable pressure limits in the design plan.)
  - c. A decommissioned well. (A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Ohio EPA.)  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(b)]
- (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.

[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(c)]

- (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.  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(d)]
- (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 b)(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.  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(e)]
- (5) The permittee shall operate the control and/or treatment system at all times when the collected gas is routed to the system.  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(f)]
- (6) If monitoring demonstrates that the operational requirements in c)(1) through c)(3) are not met, corrective action shall be taken as specified in d)(1), d)(2), b)(2)l, and/or b)(2)m. If corrective actions are taken as specified, the monitored exceedance is not a violation of the operational requirements.  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 60.753(g)]
- (7) The permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site.  
[OAC 3745-77-07(A)(1), PTI 03-17423, and 40 CFR 63.1960]
- (8) There shall be no visible emissions from asbestos-containing waste materials (ACM) during on-site transportation, transfer, deposition, or compacting operations.  
[OAC 3745-77-07(A)(1) and PTI 03-17423]



- (9) The permittee shall inspect each load of ACM delivered to the facility. The inspection shall consist of a visual examination to ensure that each shipment of ACM is received intact, leak-tight containers labeled with appropriate hazard warning labels, the name of the 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.  
[OAC 3745-77-07(A)(1) and PTI 03-17423]

- (10) Deposition and burial operations shall be conducted in a manner which prevents handling by equipment or persons that causes asbestos-containing waste materials to be broken up or dispersed before the materials are buried.  
[OAC 3745-77-07(A)(1) and PTI 03-17423]

- (11) The permittee shall cover and compact asbestos wastes in accordance with the following:

- a. As soon as practicable after the placement of friable asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day shall be covered with at least 12 inches of non-ACM. Once the ACM are covered, the area may be compacted.
- b. Care should be taken to ensure that disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of condition 'a' above.
- c. ACM shall be separated from the landfill final grade by no less than 24 inches of compacted non-ACM and a permanent cover of vegetation, or in accordance with current requirements for closure, whichever is more stringent.

[OAC 3745-77-07(A)(1) and PTI 03-17423]

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

[OAC 3745-77-07(A)(1) and PTI 03-17423]

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

[OAC 3745-77-07(A)(1) and PTI 03-17423]



- (14) 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 material. A hazard warning shall display the following information 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:

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

The letter sizes and styles shall be of a visibility at least equal to the following specifications: one inch sans serif, gothic or block in the first and second line; and at least three-fourths inches sans serif, gothic or block in the third line; and fourteen point gothic in the fourth line. Spacing between any two lines must be at least equal to the height of the upper of the two lines.

[OAC 3745-77-07(A)(1) and PTI 03-17423]

- (15) The permittee shall not accept more than 6,000 tons of waste per day for disposal at the facility. This total tonnage includes both solid waste and exempt waste, including, but not limited to, construction and demolition debris.  
[OAC 3745-77-07(A)(1) and PTI 03-17423]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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 b)(2)c.iii, the permittee shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under c)(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 Ohio EPA 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 c)(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 timeline for correcting the exceedance may be submitted to the Director for approval.



[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.755(a)(3) and (5), 40 CFR 60.756(a)]

- (2) 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 as follows:
- 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.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.755(c)(1),(2), and (3); 40 CFR 60.755(d)(1) through (4)]

- (3) 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.
  - 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.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.756(c)]

- (4) 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.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.756(f)]

- (5) The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report required pursuant to 40 CFR 60.757, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either hardcopy or electronic formats are acceptable. These records may be also required by the OEPA, Division of Solid and Infectious Waste Management, and may satisfy this permit condition.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(a)]

- (6) The permittee shall keep up-to-date, readily accessible records for the life of the control 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:

- 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 b)(2)e through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emissions readings, heat content determinations, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(b)(1) and (4)]

- (7) 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 d)(1) through d)(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.

[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(c)]



- (8) 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 or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under d)(1) through d)(3).  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(c)(2)]
- (9) The permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under d)(3), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(c)(4)]
- (10) 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.  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(d)]
- (11) The permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under b)(2)k..  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(d)(1)]
- (12) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of non-degradable waste excluded from collection as provided in b)(2)p.i as well as any nonproductive areas excluded from collection as provided in b)(2)p.ii.  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(d)(2)]
- (13) 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 c)(1) through c)(6), the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.  
[OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 60.758(e)]
- (14) The permittee shall maintain a waste shipment record for all ACM. The waste shipment record shall be legible, complete, signed and dated by the waste generator and waste disposal site operator, and shall include the following information:
  - a. The name of the work site or facility where the asbestos-containing waste was generated and the mailing address and telephone number of the facility owner.
  - b. The name, mailing address, and telephone number of the owner or operator (waste generator) responsible for handling, packing, marking, and labeling the asbestos-containing waste material.
  - c. The name, mailing address, telephone number, and site location of the active waste disposal site designated by the generator to receive the asbestos-containing waste material for disposal.
  - d. The name and address of the local, State, or U.S. EPA regional office responsible for administering the asbestos NESHAP program.



- e. A description of the asbestos-containing waste materials included in the waste shipment.
- f. The number and type of containers included in the waste shipment.
- g. The approximate volume of asbestos-containing waste material included in the waste shipment, in cubic yards.
- h. Special handling instructions or additional information relative to the waste shipment the generator may specify.
- i. A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and governmental regulations.
- j. The name, address, and telephone number of the transporter.
- k. A signature by the transporter to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in d)(14)a through d)(14)j above.
- l. A discrepancy indication space to be completed by the transporter or waste shipment owner or operator if any improperly contained asbestos waste is observed or if there is any discrepancy in the quantity of asbestos shipped and the quantity of asbestos waste received at the asbestos waste disposal site.
- m. A signature by the waste disposal site operator to acknowledge receipt of the asbestos-containing waste shipment described by the waste generator in d)(14)a through d)(14)i, except as noted in the discrepancy indication space.

As soon as possible and no longer than thirty days after receipt of the waste, send the original completed copy of the signed waste shipment record to the waste generator and retain the remaining copy for the waste site disposal record.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- (15) The permittee shall maintain records of the location, depth, area, and quantity in cubic yards of all asbestos-containing waste material within the disposal site, on a map or a diagram of the disposal area.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- (16) Except as otherwise provided in this section, the permittee shall perform inspections of the landfill fugitive dust operations/sources in accordance with the following frequencies:

landfill fugitive dust operations/sources:	minimum inspection frequency: *
construction / operation	twice daily (and not less than 4 hours apart)
solid waste handling	twice daily (and not less than 4 hours apart)





- (2) The permittee shall submit to the Director reports of the recorded information in e)(2)a through e)(2)f. For flares, reportable exceedances are defined under d)(3). The report shall be submitted by January 31 and July 31 of each year and shall cover the previous six calendar months.
- a. Value and length of time for each exceedance of the applicable parameters monitored under d)(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 d)(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 d)(3) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
  - f. The date of installation and the location of each well or collection system expansion added.
- [OAC 3745-77-07(C)(1), PTI 03-17423, and 40 CFR 63.1955(c) and 60.757(f)]
- (3) Any breakdown or malfunction of the landfill gas collection and control system resulting in the emission of raw landfill gas emissions to the atmosphere shall be reported to the Northwest District Office within one hour after the occurrence, or as soon reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.  
[OAC 3745-77-07(C)(1) and PTI 03-17423]
- (4) The permittee shall submit quarterly reports summarizing the asbestos disposal activities. The reports shall contain the following information:
- a. The name, address, and location of the facility; the calendar period covered by the report; and any changes in the methods of storage or the disposal operations.
  - b. A list of all asbestos-containing waste consignments received, including the date received, the name of the waste generator, the name and location of the facility where the load originated, the quantity of asbestos, and any discrepancy or non-conformity discovered.

These quarterly reports shall be submitted no later than January 31, April 30, July 31, and October 31 and shall cover the previous calendar quarters.  
[3745-77-07(C)(1) and PTI 03-17423]



- (5) As soon as possible and no longer than 30 days after receipt of the waste (ACM), the permittee shall send a copy of the signed waste shipment record to the waste generator. [OAC 3745-77-07(C)(1) and PTI 03-17423]
- (6) Upon discovering a discrepancy between the quantity of waste designated on a waste shipment record and the quantity actually received, the permittee shall attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the State, local, district, or U.S. EPA regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the Northwest District Office. Describe the discrepancy and attempts to reconcile it and submit a copy of the waste shipment record along with the report. [OAC 3745-77-07(C)(1) and PTI 03-17423]
- (7) The permittee shall submit, upon closure of the facility, a copy of the records of the asbestos waste disposal locations and quantities. [OAC 3745-77-07(C)(1) and PTI 03-17423]
- (8) The permittee shall notify the Northwest District Office in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided at least 10 working days before excavation begins and in no event shall the 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 Northwest District Office may require changes in the proposed emission control procedures); and
  - d. Location of any temporary storage site and the final disposal site. [OAC 3745-77-07(C)(1) and PTI 03-17423]
- (9) The permittee shall notify the Northwest District Office of any load of asbestos-containing material which is rejected, or any non-conforming load disposed of in accordance with the "Asbestos Spill Contingency Plan." Notification shall be provided as soon as possible by a phone contact, followed in writing by the next working day. The written notification shall provide a copy of the waste shipment record (WSR), if available, or when waste is not shipped with a WSR, provide available information concerning vehicle identification, source of the load, a description of the load, nature of discrepancy, and the location of disposal. If possible, non-conforming loads of suspect friable material shall be detained, or the location of disposal protected from damage, until the Ohio EPA is informed and proved the opportunity to inspect. [OAC 3745-77-07(C)(1) and PTI 03-17423]



- (10) 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.  
[OAC 3745-77-07(C)(1) and PTI 03-17423]
- (11) The permittee shall submit deviation reports that identify any each day during which the amount of waste accepted exceeded the restriction specified in c)(15). These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

f) Testing Requirements

- (1) The permittee shall calculate the NMOC emission rate using the equation(s) provided in 40 CFR 60.754. After the installation of a collection and control system in compliance with 40 CFR 60.755, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 0.00189 (Q_{\text{LFG}}) C_{\text{NMOC}}$$

where:

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$Q_{\text{LFG}}$  = flow rate of landfill gas, cubic meters per minute

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane

- a. The flow rate of landfill gas,  $Q_{\text{LFG}}$ , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.
- b. The average NMOC concentration,  $C_{\text{NMOC}}$ , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.



- c. The permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.  
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(b)]
- (2) When calculating emissions for PSD purposes, the permittee of each MSW landfill shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 40 CFR 51.166 or 40 CFR 52.21 using AP-42 or other approved measurement procedures.  
[OAC 3745-31-05(A)(3) and 3745-77-07(C)(1), and 40 CFR 60.754(c)]
- (3) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following method(s):

a. Emission Limitations:

- 44.2 tons of fugitive NMOC/year (emissions not captured by the collection and control system)
- 5240 tons of fugitive methane/year (emissions not captured by the collection and control system)

Applicable Compliance Method:

The annual emission limitations represent the maximum potential to emit determined by Landfill Gas Emission Model (LandGEM). Maximum potential emissions will occur in the year 2016 and are based on the following:

- i. 1,660,000 Mg refuse in place (2003);
- ii. annual waste acceptance rate of 1,040,000 Mg per year
- iii. maximum landfill capacity of  $14.1 \times 10^6$  Mg
- iv. an assumed landfill gas collection system efficiency of 85%

The annual limitations represent the maximum potential to emit, therefore no recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with the above limitations.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

b. Emission Limitation:

- 17.0 tons of fugitive PE/year
- 10.1 tons fugitive PM<sub>10</sub> /yr

Applicable Compliance Method:

This emission limitation was established by combining the uncontrolled emissions associated with the landfill fugitive dust operations /sources of: construction /operation, solid waste handling, soil handling, and wind erosion, and applying a 75% control efficiency for use of best available control measures (except wind erosion). The combined uncontrolled emissions were calculated using appropriate AP-42 emission factors [Section 11.9 (07/98) and 13.2.4 (01/95)] and associated maximum material throughout, surface areas, etc.



Therefore, provided compliance is shown with the requirement to apply best available control measures, compliance with the annual limitation will be assumed.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- c. Emission Limitation:  
58.0 lbs of CO/hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by multiplying the maximum landfill gas generation rate of 5743 cfm, 0.50 cubic ft methane/cubic ft of landfill gas, 909.8 BTU/cubic ft of methane, 0.37 lbs of CO/1,000,000 BTU (AP-42 Table 13.5-1, September 1991), and 60 minutes /hour.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- d. Emission Limitation:  
5.86 lbs of NO<sub>x</sub>/hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by multiplying the maximum landfill gas generation rate of 5743 cfm, 0.50 cubic ft methane/cubic ft of landfill gas, 40 lbs of NO<sub>x</sub>/1,000,000 dscf methane\*, and 60 minutes /hour.

\* AP-42, Section 2.4, Municipal Solid Waste Landfills [11/98]  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

- e. Emission Limitation:  
2.06 lbs of SO<sub>2</sub>/hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by using AP-42, Section 2.4, equations 3, 4, & 7 Municipal Solid Waste Landfills [11/98] and the following:

- i. CH<sub>4</sub> gas generation rate of 4880 m<sup>3</sup>/hr
  - ii. Sulfur concentration in the landfill gas = 46.9 ppmv
  - iii. 85% landfill gas collection efficiency
- [OAC 3745-77-07(C)(1) and PTI 03-17423]

- f. Emission Limitation:  
1.03 lbs of NMOC/hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by applying a 98% control efficiency for the flare to the maximum hourly NMOC rate to the flare (51.5 lbs NMOC/hr)\*.



\* The maximum NMOC rate to the flare was determined by Landfill Gas Emission Model (LandGEM). The maximum NMOC rate will occur in the year 2017 and is based on the values / parameters as in f)(3)a above.  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

g. Emission Limitation:

1.02 lb of HCl/hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by using AP-42, Section 2.4, equations 3, 4, & 7 Municipal Solid Waste Landfills [11/98] and the following:

i. CH<sub>4</sub> gas generation rate of 4880 m<sup>3</sup>/hr

ii. Chloride ion concentration in the landfill gas = 42 ppmv

iii. 85% landfill gas collection efficiency  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

h. Emission Limitation:

2.49 lbs of PM<sub>10</sub> /hour (flare)

Applicable Compliance Method:

Compliance with the above emission limitation may be determined by multiplying the maximum landfill gas generation rate of 5743 cfm, 0.50 cubic ft methane/cubic ft of landfill gas, 17 lbs of PM /1,000,000 dscf methane\*, and 60 minutes /hour.

\* AP-42, Section 2.4, Municipal Solid Waste Landfills [11/98] (all PM is assumed to be PM<sub>10</sub>)  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

i. Emission Limitations:

254 tons of CO/year (flare)  
25.7 tons of NO<sub>x</sub>/year (flare)  
9.03 tons of SO<sub>2</sub>/year (flare)  
4.50 tons of NMOC/year (flare)  
4.48 tons of HCl/year (flare)  
10.9 tons of PM<sub>10</sub>/year (flare)

Applicable Compliance Method:

The annual allowable emission limitations were developed by multiplying the hourly allowable emission rates by a maximum operating schedule of 8,760 hours per year, and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the hourly limitations, compliance with the annual limitations will be assumed.

[OAC 3745-77-07(C)(1) and PTI 03-17423]



- j. Emission Limitation:  
Visible fugitive PE shall not exceed 20% opacity as a three-minute average from operations not associated with asbestos-containing material (ACM).

Applicable Compliance Method:

If required, compliance with the visible emission limitation listed above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) through (B)(3)(d) of OAC rule 3745-17-03.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- k. Emission Limitation:  
There shall be no visible emissions from asbestos-containing waste materials (ACM) during on-site transportation, transfer, deposition, or compacting operations.

Applicable Compliance Method:

If required, compliance with the visible emission limitation listed 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), as applicable, of OAC rule 3745-17-03.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

g) **Miscellaneous Requirements**

(1) **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.

[OAC 3745-77-07(C)(1) and PTI 03-17423]

- (2) Upon closure of the facility, the permittee shall comply with the following provisions of OAC rule 3745-20-07 and shall submit a copy of the records of the asbestos waste disposal locations and quantities to the Director (Northwest District Office).

a. Each owner or operator of an inactive asbestos waste disposal site shall either:

- i. Discharge no visible emissions to the outside air from an inactive waste disposal site; or



- ii. Cover the asbestos-containing waste material with at least six inches of non-asbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material; or
  - iii. Cover the asbestos-containing material with at least two feet of compacted non-asbestos-containing material and maintain the cover to prevent exposure of the asbestos-containing waste material.
- b. Unless a natural barrier adequately deters access by the general public, each owner or operator of an inactive asbestos waste disposal site shall install and maintain warning signs and fencing as follows, or comply with 'a.ii' or 'a.iii' of this section:
- i. Display warning signs at all entrances and at intervals of three hundred feet or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must conform to the requirements of 'f' of this section.
  - ii. Fence the perimeter of the site in a manner adequate to deter access by the general public.
  - iii. Upon request and submission of appropriate information, the Director will determine whether a fence or a natural barrier adequately deters access by the public.
  - iv. When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Director to determine whether a fence or a natural barrier adequately deters access by the general public.
- c. The owner or operator may use an alternative control method that has received prior approval of the Director rather than comply with the requirements of 'a' or 'b' of this section.
- d. Each owner or operator of an inactive waste disposal site shall notify the Director in writing at least forty-five days prior to excavating or otherwise disturbing or removing any asbestos-containing waste material. 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 to the Director at least ten working days before excavation begins. In no event shall excavation begin earlier than the date specified in the original notification. Each owner or operator shall include the following information in the notice:
- i. Scheduled starting and completion dates.
  - ii. Reason for disturbing the waste.



- iii. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing material. If deemed necessary, the director may require changes in the emission control procedures to be used.
- iv. Location of any temporary storage site and the final disposal site.
- e. Within sixty days of a site becoming inactive, record a notation of the presence of asbestos-containing material on the deed to the facility property and on any other instrument that would normally be examined during the title search; this notation will, in perpetuity, notify any potential purchaser of the property that:
  - i. The land has been used for the disposal of asbestos-containing waste material; and
  - ii. The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in paragraph (C)(2) of rule 3745-20-06 of the Ohio Administrative Code has been filed with the Director; and
  - iii. The site is subject to Chapter 3745-20 of the Ohio Administrative Code and 40 CFR Part 61, Subpart M.
- f. The warning signs referenced in 'b.i' of this section must:
  - i. Be posted in such a manner and location that a person can easily read the legend; and
  - ii. Conform to the requirements for a twenty inch by fourteen inch upright format warning sign and display the following legend in the lower panel with letter sizes of at least one inch sans serif, gothic, or block. Spacing between any two lines must be at least equal to the height of the upper of the two lines:

"ASBESTOS WASTE DISPOSAL SITE  
DO NOT CREATE DUST  
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH"  
[OAC 3745-77-07(C)(1) and PTI 03-17423]

- (3) Compliance with the terms and conditions of this permit for this emissions unit which are established under authority of NSPS Subpart WWW shall also constitute compliance with MACT Subpart AAAA requirements.

Correspondingly, violations of the terms and conditions of this permit for this emissions unit which are established under authority of NSPS Subpart WWW shall also constitute violation of MACT Subpart AAAA requirements.

Compliance for 40 CFR 63 Subpart AAAA is determined in the same way it is determined for 40 CFR 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 the c)(3), are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, the permittee has failed to meet the control device operating conditions described in this subpart and has deviated from the requirements of this subpart.

[OAC 3745-77-07(C)(1), PTI 03-17423, 40 CFR 63.1955(a)(1), and 40 CFR 63.1960]

- (4) Deviation means any instance in which the permittee:
- a. Fails to meet any requirement or obligation established by Subpart AAAA, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
  - b. Fails to meet any term or condition of this Title V operating permit; or
  - c. Fails to meet any emission limitation, (including any operating limit), or work practice standard in Subpart AAAA during SSM, regardless of whether or not such failure is permitted by this subpart.

Deviation also includes when a SSM plan is not developed, implemented, or maintained on site.

[OAC 3745-77-07(C)(1), PTI 03-17423, 40 CFR 63.1965(c), and 40 CFR 63.1990]

- (5) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR Part 60 are also federally enforceable.