



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

6/25/2013

Certified Mail

Michael Darnell
Carbon Limestone Sanitary Landfill
8100 South State Line Road
Lowellville, OH 44436

Facility ID: 0250070850
Permit Number: P0085730
County: Mahoning

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, Youngstown-Vindicator. 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 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, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

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, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; West Virginia

PUBLIC NOTICE
6/25/2013 Issuance of Draft Air Pollution Title V Permit

Carbon Limestone Sanitary Landfill

8100 South State Line Road,

Lowellville, OH 44436

Mahoning County

FACILITY DESC.: Solid Waste Landfill

PERMIT #: P0085730

PERMIT TYPE: Renewal

PERMIT DESC: Renewal Title V permit for the municipal solid waste landfill and the associated paved and unpaved roadways

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: Amysue O'Reilly, Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087. Ph: (330)425-9171



Statement of Basis For Air Pollution Title V Permit

Facility ID:	0250070850
Facility Name:	Carbon Limestone Sanitary Landfill
Facility Description:	Sanitary Landfill with active GCCS including two, enclosed 6000 cfm flares and one 1000 candle flare. Associated LFG generator station permitted separately
Facility Address:	8100 South State Line Road, Lowellville, OH 44436
Permit #:	P0085730, 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 checked="" type="checkbox"/> Nitrogen Oxides <input type="checkbox"/> Particulate Matter ≤ 10 microns <input checked="" type="checkbox"/> Single Hazardous Air Pollutant <input checked="" type="checkbox"/> Combined Hazardous Air Pollutants <input checked="" type="checkbox"/> Maximum Available Control Technology Standard(s) <input checked="" 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.	None
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)	F001 – PTI P0105125 was issued 8/5/2009. All of the OAC rule 3745-31-05(A) requirements in Title V renewal were replaced by the terms of this PTI. F002 - PTI P0109845 was issued 8/22/2012. All of the ORC 3704.09(T) requirements in Title V renewal were replaced by the terms of this PTI. Further the Landfill NSPS was incorporated by reference.
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		<u>Comments</u>
	SIP (3745-)	Other	
B.2		IEU list	IEU listing

C. Emissions Unit Terms and Conditions

<p>Key: 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 St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) Misc = miscellaneous requirements</p>															
EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	<u>Comments</u>
		SIP (3745-)	Other												
F001 Paved roadway	54 TPY fug PE	31-05(A)(3)			Y	Y	N	N	Y	N	Y	N	N	N	OR- speed limit posted M – daily inspections if dust control measures needed R –daily records of inspections and controls



F002 Each enclosed flare	SO2- 2.8 lbs/hr, 12.3 TPY	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 Each enclosed flare	PM10 3.2 lbs/hr, 14.0 PTY	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 Each enclosed flare	VOC 0.37 lb/hr	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 candle flare	CO- 0.37 lb/mmBtu	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 candle flare	NOx- 0.068 lb/mmBtu,	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 candle flare	SO2- 0.467 lbs/hr	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 candle flare	PM10 0.51 lbs/hr,	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002 candle flare	VOC 0.062 lb/hr	ORC 3704-09(T)			N	N	N	N	N	N	N	N	N	N	
F002	No VE from candle flare except for 5 min/2 hours		40 CFR 60 Subpart WWWW		N	N	N	N	N	N	N	N	N	N	
F002	Open flare design		40 CFR 60 Subpart WWWW		N	N	N	N	N	N	N	N	N	N	
F002	98% DE of NMOC or 20 ppm from enclosed flare		40 CFR 60 Subpart WWWW		Y	Y	N	N	Y	N	Y	N	Y	Y	All as required by rule. Incorporated by detailed reference
F002	VE 10% 6-minute ave from		40 CFR 60 Subpart		Y	Y	N	N	Y	N	Y	N	Y	Y	All as required by rule. Incorporated by detailed reference



	enclosed flare		WWWW													
F002	LFG treated prior to sale or use		40 CFR 60 Subpart WWWW		Y	Y	N	N	Y	N	Y	N	Y	Y		All as required by rule. Incorporated by detailed reference
F002	LF GCCS operations		40 CFR 60 Subpart WWWW		Y	Y	N	N	Y	N	Y	N	Y	Y		All as required by rule. Incorporated by detailed reference
F002	LF GCCS operations		40 CFR 63, Subpart AAAA		Y	Y	N	N	Y	N	Y	N	Y	Y		All as required by rule. Incorporated by detailed reference
F002	VE limit	17-07(B)(1)		Y												
F002	PE limit	17-08(B)		Y												
F002	No open burning	19			N	N	N	N	N	N	N	N	N	N		
F002	Requirements for closing landfill	20-07(D)			N	N	N	N	N	N	N	N	N	N		
F002	total VOC from landfill and control systems shall not exceed 249 tpy	31-05(D)			Y	Y	N	N	R	N	R	N	N	N		OR-limit organic waste to 1,600,000 tons per year M-monitor and classify load for waste stream R- record monthly the tons of each type of waste stream Rp- total tons per year of organic waste and the associate waste streams



DRAFT

**Division of Air Pollution Control
Title V Permit
for
Carbon Limestone Sanitary Landfill**

Facility ID:	0250070850
Permit Number:	P0085730
Permit Type:	Renewal
Issued:	6/25/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Title V Permit
for
Carbon Limestone Sanitary Landfill

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Draft Title V Permit
Carbon Limestone Sanitary Landfill
Permit Number: P0085730
Facility ID: 0250070850
Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0250070850
Facility Description: Sanitary Landfill
Application Number(s): A0016406, A0038220, A0045579, A0047644
Permit Number: P0085730
Permit Description: Renewal Title V permit for the municipal solid waste landfill and the associated paved and unpaved roadways
Permit Type: Renewal
Issue Date: 6/25/2013
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0085729

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

Carbon Limestone Sanitary Landfill
8100 South State Line Road
Lowellville, OH 44436

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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, Northeast 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 (540 days) and no later than 6 months (180 days) 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
Carbon Limestone Sanitary Landfill
Permit Number: P0085730
Facility ID: 0250070850
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
 - (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

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

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

- (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 promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. 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."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northeast District Office.

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

3. 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) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition 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 appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (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 appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. An identification of each term or condition of this permit that is the basis of the certification.
 - b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent.



- d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
- (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 appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

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 Fed. Reg. 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 has 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.

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

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

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

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

(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 (i.e., postmarked) 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 potentials 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
Carbon Limestone Sanitary Landfill
Permit Number: P0085730
Facility ID: 0250070850
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



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.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21:

F003- Screening plant (PTI 02-16670)

F004-Stationary solidification basin operation (PTI 02-7751)

F006- Portable liquid waste solidification operation (P0110135)



Draft Title V Permit
Carbon Limestone Sanitary Landfill
Permit Number: P0085730
Facility ID: 0250070850
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. F001, Roadway Traffic

Operations, Property and/or Equipment Description:

Paved and Unpaved Roadways and Parking Areas in and Around the Landfill

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
Paved roadways and parking areas		
a.	OAC rule 3745-31-05(A)(3) (PTI P0105125 effective 8/5/2009)	54.0 tons/year of fugitive particulate emissions (PE) There shall be no visible PE except for 1 minute during any 60-minute period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. [See b)(2)a through b)(2)f.]
Unpaved roadways and parking areas		
b.	OAC rule 3745-31-05(A)(3) (PTI P0105125 effective 8/5/2009)	215.0 tons/year of fugitive PE There shall be no visible PE except for 3 minutes during any 60-minute period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. [See b)(2)a through b)(2)f.]



Unpaved and paved roadways and parking areas		
c.	OAC rule 3745-17-07(B)(5)	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).
d.	OAC rule 3745-17-08(B)	The permittee 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).

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements.

In accordance with the permittee's application, the permittee has committed to treat the paved and unpaved roadways and parking areas with water via a spray truck and/or by sweeping at sufficient treatment frequencies and to maintain and enforce speed limits sufficient to ensure compliance with the visible emissions limitations of this permit.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. 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 paved or unpaved roadways and parking areas that are 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.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. 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.



e. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface resulting from 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.

f. 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 (BAT) requirements of OAC rule 3745-31-05.

g. Paved and unpaved roadways and parking areas, and the vehicle characteristics included in this emissions unit are:

- Unpaved road segment A – 0.19 miles, 85,997 VMT per year, and 30.1 average vehicle weight
- Paved road segment B - 0.39 miles, 176,519 VMT per year, and 30.1 average vehicle weight
- Unpaved road segment C - 1.29 miles, 583,871 VMT per year, and 30.1 average vehicle weight
- Paved road segment D - 0.07 miles, 1,310 VMT per year, and 2.0 average vehicle weight
- Unpaved road segment E - 0.17 miles, 3,182 VMT per year, and 30.1 average vehicle weight
- Unpaved road segment F - 0.92 miles, 111,627 VMT per year, and 29.0 average vehicle weight

c) Operational Restrictions

(1) The permittee shall post speed limit signs identifying the maximum on-site speed limit on facility roadways.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of the paved and unpaved roadways and parking areas once per day of operation.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

- (3) The permittee may, upon receipt of written approval from the Northeast District Office of Ohio EPA, modify the above-mentioned inspection frequencies, if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

- (4) 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.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

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

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
- a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and



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

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

- (2) The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

There shall be no visible particulate emissions of fugitive dust from any unpaved roadway or parking area surface except for a time not to exceed three (3) minutes during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the emission limitation for unpaved roadways and parking areas 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"), and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- b. Emission Limitation:

There shall be no visible particulate emissions of fugitive dust from any paved roadway or parking area surface except for a time not to exceed one (1) minute during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the emission limitation for paved roadways and parking areas 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"), and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- c. Emission Limitation:

215.0 tons/year of fugitive PE from unpaved roadways and parking areas

Applicable Compliance Method:

Compliance with fugitive PE limitation shall be determined by using the emission factor equation in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways.



These emission limits are based on the calculations submitted by the permittee for road segments A, C, E and F, including a 90 percent (%) control efficiency for PE.

d. Emission Limitation:

54.0 tons/year of fugitive PE from paved roadways and parking areas

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. These emission limits are based on the calculations submitted by the permittee for road segments B and D, including a 90 percent (%) control efficiency for PE.

[Authority for requirement: PTI P0105125 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



2. F002, MSW Landfill

Operations, Property and/or Equipment Description:

Municipal Solid Waste (MSW) landfill operations, waste disposal activities including dumping, spreading, compacting, and covering. The active landfill gas capture and collection system includes two 6,000 cfm enclosed combustors and a 1000 cfm candle flare. Alternatively, the raw landfill gas may be sold to a beneficial engine plant. The landfill is not permitted to accept regulated asbestos-containing waste.

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.	ORC 3704.03(T) [PTI P0109845 effective 8/22/2012]	<p>The requirements of this rule are equivalent to the 40 CFR Part 63, Subpart AAAAA as specified below. The GCCS is designed to capture and destroy NMOC as a surrogate for HAP emissions.</p> <p>Fugitive emissions from the landfill hill:</p> <p>Visible emissions of non-asbestos fugitive dust (load-in and wind erosion) from this emissions unit shall not exceed 20% opacity as a 3-minute average.</p> <p>Fugitive volatile organic compound (VOC) emissions shall not exceed 57.5 tons per rolling, 12-month period.</p> <p>Fugitive particulate emissions (PE) shall not exceed 12.4 tons per year.</p> <p>See b)(2)h.</p> <p>6,000 ft³/min Enclosed Combustor FL-150 and 6,000 ft³/min Enclosed Combustor FL-100:</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 0.15 lb/mmBtu, 27.0 lbs/hr and 118.3 tons per year from each enclosed combustor.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 0.06 lb/mmBtu, 10.8 lbs/hr and 47.3 tons per year from each enclosed combustor.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 2.8 lbs/hr and 12.3 tons per year from each enclosed combustor.</p> <p>Particulate matter less than 10 microns in diameter (PM₁₀) shall not exceed 3.2 lbs/hr and 14.0 tons per year from each enclosed combustor.</p> <p>All PE from each enclosed combustor are PM₁₀.</p> <p>VOC emissions shall not exceed 0.37 lb/hr from each enclosed combustor.</p> <p>1000 ft³/min Candlestick Flare</p> <p>CO emissions shall not exceed 0.37 lb/mmBtu from the candlestick flare.</p> <p>NO_x emissions shall not exceed 0.068 lb/mmBtu from the candlestick flare.</p> <p>SO₂ emissions shall not exceed 0.467 lb/hr from the candlestick flare.</p> <p>PM₁₀ emissions shall not exceed 0.51 lb/hr from the candlestick flare.</p> <p>All PE from the candlestick flare are PM₁₀.</p> <p>VOC emissions shall not exceed 0.062 lb/hr from the candlestick flare.</p>
b.	<p>40 CFR 60, Subpart WWW (60.750-759)</p> <p>[In accordance with 40 CFR Part 60.752 this emissions unit is an</p>	<p>(<i>open flare</i>) There shall be no visible particulate emissions from the candlestick flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<p>existing municipal solid waste landfill having a design capacity greater than 2.5 million Mg and a NMOC emission rate of greater than 50 Mg/yr, and is subject to the emissions limitations/control measures specified in this section.]</p>	<p>he open flare shall be designed and operated in accordance with 40 CFR 60.18.</p> <p><i>(control system)</i> The control system shall be designed and operated to reduce NMOC by 98%, by weight; or, if the control is an enclosed combustion device, shall either reduce the NMOC by 98%, by weight or reduce the outlet NMOC concentration to less than 20 ppm by volume, on a dry basis as hexane at 3% oxygen.</p> <p>Visible particulate emissions from the stacks serving enclosed combustors Flare-100 and Flare-150 shall not exceed 10% opacity as a 6-minute average.</p> <p><i>(treatment system)</i> The permittee shall route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR Part 60.752(b)(2)(iii)(A) <i>(open flare)</i> or (B) <i>(control system)</i>.</p> <p>See b)(2)a.</p>
c.	<p>40 CFR Part 63, Subpart AAAA (63.1930-1990)</p> <p>[In accordance with 40 CFR Part 63.1935, this emissions unit is an existing municipal solid waste landfill with a design capacity greater than 2.5 million Mg and a NMOC emission rate of greater than 50 Mg/yr.]</p>	<p>See b)(2)b.</p>
d.	<p>OAC rule 3745-17-08(B)</p>	<p>The permittee 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).</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-07(B)(1)	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).
f.	OAC chapter 3745-19	See b)(2)c.
g.	OAC rule 3745-20-02 OAC rule 3745-20-06	Deposition and burial operations of any suspected non-regulated asbestos-containing waste or demolition debris shall be conducted in a manner that prevents any asbestos content from being broken up or dispersed before such materials are buried. See b)(2)i and b)(2)j.
h.	OAC rule 3745-20-07(D)	See b)(2)d.
i.	OAC rule 3745-31-05(D)	The total VOC emissions from the landfill and control systems shall not exceed 249 tons per year. See b)(2)k.

(2) Additional Terms and Conditions

- a. The complete NSPS requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting Ohio EPA, Northeast District Office, Division of Air Pollution Control. The applicable requirements are listed in c)(1), d)(1), e)(1) and f)(2) below.

60.752(b)(2)(i)	Collection and control system design plan requirements
60.752(b)(2)(ii)	Collection and control system installation requirements
60.752(b)(2)(iii)	Control device design and operating requirements
60.755(a)(6)	Approval by Administrator for non-conforming GCCS
60.755(b)	Timeline for placement of wells
60.759	Active collection system specifications

- b. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting Ohio EPA, Northeast District Office, Division of Air Pollution Control. The applicable requirements are listed in c)(2), d)(2) and e)(2) below.

63.1990	Definitions
63.1945	Compliance timeframe
63.1950	Termination of compliance requirements
63.1955(a)(1)	Compliance with 40 CFR 60, Subpart WWW



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63.1955(b)	Compliance standards for collection and control system
63.1955(c)	Approval by Administrator for non-conforming GCCS

- c. There shall be no open burning, in violation of OAC chapter 3745-19, at this facility.
- d. If this landfill is permanently closed, the permittee shall comply with all of the applicable provisions of OAC rule 3745-20-07.
- e. The following landfill fugitive dust operations/sources are covered by this permit and subject to the above requirements:
 - i. daily cover and handling and placement;
 - ii. solid waste handling (dumping);
 - iii. spreading, grading and compaction;
 - iv. truck loading and unloading;
 - v. soil transport; and
 - vi. storage pile activities (loading, unloading, wind erosion).
- f. The permittee shall employ best available control measures for the above identified landfill fugitive dust operations/sources 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 with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance.
- g. The above-mentioned 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 affirms that use of the measures is unnecessary. Implementation of the control measures shall not be necessary for fugitive dust sources which are 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.
- h. The annual VOC emission limitation represents the VOC portion of the fugitive nonmethane organic compound (NMOC) emission rate from the landfill. For the purpose of this permit and federal enforceability, NMOC emissions have been converted to VOC by applying the AP-42 Chapter 2.4 (11/98) conversion rate of 39% to the predicted NMOC emission rate from the Landfill Gas Emission Model (LandGEM). An NMOC emission limit was not established under this rule because there is not an established national ambient air quality standard



(NAAQS) associated with NMOC. 40 CFR 60.750 et seq. (NSPS, Subpart WWW) addresses NMOC emissions; therefore, the monitoring, record keeping, and reporting requirements of this permit will reflect NMOC rather than VOC.

- i. The facility cannot accept for disposal any regulated asbestos-containing material as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR Part 61, Subpart M, Section 141 and OAC rule 3745-20, or any subsequent revisions to either rule. Regulated asbestos-containing material is defined to include:
 - i. friable asbestos material;
 - ii. Category I nonfriable asbestos-containing material that has become friable;
 - iii. Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or
 - iv. Category II nonfriable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.
- j. The permittee shall be limited to accepting only non-regulated asbestos-containing waste materials. The permittee shall ensure that any Category I nonfriable asbestos-containing waste materials accepted for disposal will not be subjected to sanding, grinding, cutting, or abrading and shall not become friable during processing at the landfill; and shall ensure that Category II nonfriable asbestos-containing waste materials accepted for disposal do not become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during its handling, transfer, and burial at the landfill. Any nonfriable Category I or Category II asbestos-containing material that was generated from a NESHAP source and which becomes friable, also becomes subject to the Asbestos NESHAP regulations. If any regulated asbestos-containing waste material arrives at the landfill it cannot be accepted for disposal; and if any non-regulated asbestos-containing material becomes friable after it is accepted for disposal the permittee shall:
 - i. cause or permit no visible emissions to the outside air from the asbestos-containing waste materials during on-site transportation, transfer, deposition, or compacting operations;
 - ii. assure that deposition and burial operations are 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;
 - iii. cover the asbestos-containing waste material with at least twelve inches of nonasbestos-containing material, as soon as practicable after deposition, but no later than at the end of the operating day; and



- iv. assure that during the unloading, deposition, burial and initial compaction of asbestos-containing waste materials, the disposal site is restricted adequately to deter unauthorized entry of the general public and any unauthorized personnel to within one hundred feet of the operations.
- k. The maximum annual organic-containing waste acceptance shall not exceed 1,600,000 tons per year. The list of organic-containing waste codes shall be proposed by the permittee and approved annually by Ohio EPA, Division of Air Pollution Control, Northeast District Office.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable restrictions required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.753(a)	Collection system installation requirement
60.753(b)	Collection system negative pressure requirements
60.753(c)	Wellhead operational standards
60.753(d)	Surface monitoring standards
60.753(e)	Collection or control system shutdown
60.753(f)	Operate control or treatment system
60.753(g)	Corrective action for operational parameters

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(A)(1) and 40 CFR Part 60, Subpart WWW]

- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart AAAA, including the following sections:

63.1960	Compliance demonstration, deviations, SSM plan
63.1965	What constitutes a deviation

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(A)(1) and 40 CFR Part 60, Subpart AAAA]

- (3) The maximum daily waste receipts for this emissions unit shall not exceed 11,000 tons.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(A)(1)]

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

- a. As soon as practical after the placement of asbestos, but no later than the end of each working day, the asbestos-containing waste materials deposited at the site during the operating day shall be covered with at least 12 inches of non-asbestos-containing materials. Once the asbestos-containing materials are covered, the area shall be compacted.
- b. Care shall be taken to ensure that disposed asbestos shall not be re-excavated in subsequent operations. Any accidentally exposed material shall be immediately recovered in accordance with the provisions of this permit.



- c. Asbestos-containing waste materials shall be separated from the landfill final grade by no less than 24 inches of compacted non-asbestos-containing materials or by at least 6 inches of compacted non-asbestos-containing materials with a permanent cover of vegetation over the area, or in accordance with current requirements for closure, whichever is more stringent.

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(A)(1) and OAC rule 3745-20-06]

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

- (1) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.754(b)	NMOC emission rate calculation after installation of collection and control system
60.755(a)(1)	Gas generation flow rate calculation to determine compliance
60.755(a)(2)	Determining sufficient density of gas collectors
60.755(a)(3)	Gas collection system monitoring and corrective action
60.755(a)(5)	Well monitoring and corrective action
60.755(c)	Surface monitoring procedures and corrective actions
60.756(a)	Monitoring of active gas collection system
60.756(b)	Monitoring of enclosed combustor and open flare
60.756(c)	Records retention
60.756(f)	Surface monitoring frequency
60.758(a)	Recordkeeping requirements
60.758(b)	Recordkeeping for flare compliance demonstration and design
60.758(c)	Recordkeeping for control device parametric monitoring deviations
60.758(d)	Recordkeeping for gas collector map
60.758(e)	Recordkeeping for collection and control system exceedances

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart WWW]

- (2) The permittee shall comply with the applicable monitoring and record keeping restrictions required under 40 CFR Part 63, Subpart AAAA, including the following sections:

63.1960	Compliance demonstration, deviations, SSM plan
63.1965	What constitutes a deviation
63.1975	Clarification of 3-hour block averages
63.1980(a)	Recordkeeping according to 40 CFR 60, subpart WWW
63.1980(b)	Recordkeeping according to 40 CFR 63 and Table 1, NESHAP General Provisions, of this subpart including SSM plan requirements

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart AAAA]



- (3) The permittee shall continuously monitor and record the landfill gas flow routed to the third party treatment system that processes the collected gas for beneficial use.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall identify and record each instance that the enclosed combustors or flare were not in operation when the landfill gas was not being routed to the third party treatment system.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall classify each load of waste received by waste code and record the weight received for each waste code daily, in tons.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing and/or nondegradable wastes, excluded from collection as provided in 40 CFR 60.759(a)(3)(i), as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1), and 40 CFR 60.759]

- (7) The permittee shall perform inspections of the landfill operation areas daily.

The inspections shall be performed during representative, normal operating conditions. The purpose of the inspections is to determine the need for implementing the abovementioned control measures for particulate emissions. The inspections shall be performed during representative, normal operating conditions. No inspection shall be necessary for a landfill fugitive dust operation/source 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 event shall be performed as soon as such event(s) has (have) ended, except if the next inspection is within one week.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall maintain a daily operations log which records/documents any watering activity employed to minimize or eliminate visible emissions of fugitive dust for each waste dumping/placement area.

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 or due to the facility is closed;
- 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 control measures were required but not implemented.

The information above shall be kept separately for each landfill fugitive dust operation/source identified above, and shall be updated on calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing and/or nondegradable wastes, excluded from collection as provided in 40 CFR 60.759(a)(3)(i), as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii).

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1), and 40 CFR 60.759]

e) Reporting Requirements

- (1) The permittee shall submit semiannual reports and such other notifications and reports to Ohio EPA, Northeast District Office as required pursuant to 40 CFR Part 60, Subpart WWW, including the following sections:

60.757(a)	Initial and amended design capacity reporting
60.757(b)	NMOC emission rate reporting
60.757(c)	Collection and control system design plan reporting
60.757(d)	Closure report reporting
60.757(e)	Control equipment removal reporting
60.757(f)	Active collection system reporting
60.758(c)	Record keeping for control device parametric monitoring deviations

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart WWW]

- (2) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 63, Subpart AAAA, including the following sections:

63.1980(a)	Semiannual reports according to 40 CFR 60, Subpart WWW
63.1980(b)	Reporting according to 40 CFR 63 and Table 1, NESHAP General Provisions, of this subpart including SSM plan requirements

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart AAAA]

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



- a. each day during which a fugitive dust inspection was not performed by the required frequency;
- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit annual reports that include:

- a. the actual organic-containing waste acceptance per waste code, in tons per year;
- b. the actual non-organic containing waste acceptance per waste code, in tons per year;
- c. the total waste acceptance, in tons per year; and
- d. the total VOC emissions, and LandGEM inputs and output files, updated for the previous year's waste receipts.

Submitting the complete Fee Emission Report, including the LandGEM input and output files, in a timely manner will satisfy the annual report requirement in e)(4)c above.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible emissions of non-asbestos fugitive dust (load-in and wind erosion) from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with USEPA Reference Method 9 as set forth in "Appendix A 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 paragraph (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive VOC emissions from the landfill shall not exceed 57.5 tons per rolling, 12-month period.



Applicable Compliance Method:

Compliance shall be demonstrated based on the following equation:

$$E = F \times 39 \% \times (1 - PC)$$

where:

E = emissions of fugitive VOC, in tpy;

F = total flowrate of NMOC at peak year of 2048, as predicted by LANDGEM model, 589.5 tpy;

39% = the fractional portion of VOC in NMOC according to AP-42, Section 2.4 MSD Landfills, Table 2.4-2; and

PC = estimated fractional capture efficiency of NMOC by collection/control system, assumed to be 75%.

The LANDGEM model annual waste acceptance rate was limited to 1,600,000 tons per year.

c. Emission Limitation:

Fugitive PE from the landfill shall not exceed 12.4 tons per year.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equations from AP-42, Section 13.2.4 Aggregate Handling and Storage Piles.

$$E_t = E_1 + E_2$$

where:

E_t = total fugitive particulate emissions from landfill, in tpy;

E₁ = emissions from landfill operations, in tpy; and

E₂ = emission from wind erosion, in tpy.

$$E_1 = k \times 0.0032 [(U/5)^{1.3}/(M/2)^{1.4}] \times T / 2,000$$

where:

U = mean wind speed, mph (assumed 10);

M = material moisture content, % (per Table 13.2.4-1, M=12);

0.0032 = equation constant;

k = particle size multiplier, size 30 microns (0.74);



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T = tonnage handled, no more than 4,015,000 tons/yr; and

2,000 = lbs/ton;

$$E_2 = [1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15)] \times A \times (365 / 2,000) \times (1 - CE)$$

where:

s = silt content, % (per Table 13.2.4, s= 9%);

p = # of days with <0.01 inch of precipitation (per Figure 13.2.2-1, p=150 days);

f = % of time wind speed exceeds 12 mph, % (assume 20);

A = area of landfill that is actively being worked, no more than 10 acres;

365 = days/year;

2,000 = lbs/ton; and

CE = fractional control efficiency (0.50).

d. Emission Limitations:

CO emissions shall not exceed 0.15 lb/mmBtu, 27.0 lbs/hr and 118.3 tons per year from each enclosed combustor.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 10.

Alternatively, compliance shall be demonstrated by the manufacturer's CO emission factor for this combustor of 0.15 lb/mmBtu.

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (27.0 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

e. Emission Limitations:

NO_x emissions shall not exceed 0.06 lb/mmBtu, 10.8 lbs/hr and 47.3 tons per year from each enclosed combustor.



Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 7 or 7E.

Alternatively, compliance shall be demonstrated by the manufacturer's NO_x emission factor for this combustor of 0.06 lb/mmBtu.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (10.8 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

f. Emission Limitations:

SO₂ emissions shall not exceed 2.8 lbs/hr and 12.3 tons per year from each enclosed combustor.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C.

Compliance with the short term emission limitation shall be calculated by the equation below:

$$E = [(Q \times (46.9 \text{ ppmv} / 1,000,000 \text{ MMscf/scf}) \times (64.066 \text{ molecular weight of SO}_2)) / (386 \text{ scf/lb-mol LFG})] \times (60 \text{ min/hr})$$

where:

E = emission rate, in pound per hour;

Q = actual landfill gas flow rate to the flare, i.e., 6000 scfm maximum;

46.9 ppmv = sulfur concentration in landfill gas from AP-42, Section 2.4 MSW Landfills; and

386 = the mass volume of landfill gas, in scf/lb-mol.

The tpy emission limitation was developed by multiplying the short-term allowable SO₂ emission limitation (2.8 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.



g. Emission Limitations:

PM₁₀ emissions shall not exceed 3.2 lbs/hr and 14.0 tons per year from each enclosed combustor.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with the methods and procedures specified on 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 5 or 201A and 202.

The tpy emission limitation was developed by multiplying the short-term allowable PM₁₀ emission limitation (3.2 lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

h. Emission Limitation:

VOC emissions shall not exceed 0.37 lb/hr from each enclosed combustor.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A.

Compliance with the short term emission limitation shall be calculated by the equations below:

$$E = [(Q \times (595^* \text{ ppmv}/1,000,000 \text{ MMscf/scf} \times 39 \text{ percent}) \times (86.18 \text{ molecular weight of NMOC as hexane})) / (386 \text{ scf/lb-mol LFG})] \times [(60 \text{ min/hr})(1-.98)]$$

where:

E = emission rate, in pound per hour;

Q= actual landfill gas flow rate to the flare, i.e., 6000 scfm maximum;

595 ppmv = default NMOC concentration in landfill gas from AP-42, Section 2.4 MSW Landfills;

39% = the fractional portion of VOC in NMOC according to AP-42, Section 2.4 MSD Landfills, Table 2.4-2;

386 = the mass volume of landfill gas, in scf/lb-mol; and

98% = is the minimum destruction efficiency of the control device.



i. Emission Limitation:

Visible particulate emissions from the stacks serving enclosed combustors Flare-100 and Flare-150 shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

j. Emission Limitation:

CO emissions shall not exceed 0.37 lb/mmBtu from the candlestick flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be demonstrated by the CO emission factor of 0.37 lb/mmBtu from AP-42, Section 13.5 Industrial Flares, Table 13.5-1.

k. Emission Limitation:

NO_x emissions shall not exceed 0.068 lb/mmBtu from the candlestick flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be demonstrated by the NO_x emission factor of 0.068 lb/mmBtu from AP-42, Section 13.5 Industrial Flares, Table 13.5-1.

l. Emission Limitation:

SO₂ emissions shall not exceed 0.467 lb/hr from the candlestick flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be calculated by the equation below:

$$E = [(Q \times (46.9 \text{ ppmv} / 1,000,000 \text{ MMscf/scf}) \times (64.066 \text{ molecular weight of SO}_2) / (386 \text{ scf/lb-mol LFG})] \times (60 \text{ min/hr})$$

where:

E = emission rate, in pound per hour;



Q = actual landfill gas flow rate to the flare, i.e., 1000 scfm maximum;

46.9 ppmv = sulfur concentration in landfill gas from AP-42, Section 2.4 MSW Landfills; and

386 = the mass volume of landfill gas, in scf/lb-mol.

m. Emission Limitation:

PM₁₀ emissions shall not exceed 0.51 lb/hr from the candlestick flare.

Applicable Compliance Method:

Compliance with the short term emission limitation may be calculated by the equation below:

$$E = EF \times Q \times PM \times 60$$

where:

E = emission rate, lb/hr;

EF = emission factor from AP-42, Section 2.4 MSW Landfills (11/98), 17 lbs/10⁶ ft³ of CH₄;

Q = flow rate of combustor, scfm;

PM = fractional portion of LFG that is CH₄, 0.50; and

60 = conversion factor, minutes/hour.

n. Emission Limitation:

VOC emissions shall not exceed 0.062 lb/hr from the candlestick flare.

Applicable Compliance Method:

Compliance with the short term emission limitation shall be calculated by the equation below:

$$E = [(Q \times (595 \text{ ppmv} / 1,000,000 \text{ MMscf/scf} \times 39 \text{ percent}) \times (86.18 \text{ molecular weight of NMOC as hexane}) / (386 \text{ scf/lb-mol LFG})] \times [(60 \text{ min/hr})(1 - 0.98)]$$

where:

E = emission rate, in pound per hour;

Q = actual landfill gas flow rate to the flare, i.e., 1000 scfm maximum;

595 ppmv = default NMOC concentration in landfill gas from AP-42, Section 2.4 MSW Landfills;



39% = the fractional portion of VOC in NMOC according to AP-42, Section 2.4 MSD Landfills, Table 2.4-2;

386 = the mass volume of landfill gas, in scf/lb-mol; and

98% = is the minimum destruction efficiency of the control device.

o. Emission Limitation:

There shall be no visible particulate emissions from the candlestick flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance with the visible emissions limitation shall be determined in accordance with U.S. EPA Method 22 in Appendix A of 40 CFR Part 60. The observation period is 2 hours and shall be used according to Method 22.

p. Emission Limitation:

The total VOC emissions from the landfill and control systems shall not exceed 249 tons per year.

Applicable Compliance Method:

Compliance with the annual VOC limitation shall be determined by use of US EPA LandGEM, the most recent emission test results demonstrating the enclosure combustor flare capacity, and the VOC emission factor in AP-42 Section 13.5 Industrial Flares, Table 13.5-1 for the candle flare.

[Authority for requirement: PTI P0109845 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.754(d)	Flare Performance test methods
60.754(e)	Net heating value for performance test
60.755(d)	Surface monitoring instrumentation specifications and procedures

[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart WWW]

g) Miscellaneous Requirements

- (1) The permittee shall comply with the applicable requirements required under 40 CFR Part 60, Subpart WWW, including the following sections:

60.754(c)	PSD applicability
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[Authority for requirement: PTI P0109845, OAC rule 3745-77-07(C)(1) and 40 CFR Part 60, Subpart WWW]