



Environmental  
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

6/12/2012

Certified Mail

Mr. Scott Herman  
Cuyahoga Regional Sanitary Landfill  
4339 Tuttle Road  
Geneva, OH 44041

Facility ID: 1318247813  
Permit Number: P0095456  
County: Cuyahoga

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 5/2/2012. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

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

and Cleveland Division of Air Quality  
2nd Floor  
75 Erieview Plaza  
Cleveland, OH 44114

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

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

Cc: Cleveland Division of Air Quality





## Response to Comments

Facility ID:	1318247813
Facility Name:	Cuyahoga Regional Sanitary Landfill
Facility Description:	Sanitary landfill.
Facility Address:	6640 Cochran Rd. Solon, OH 44139 Cuyahoga County
Permit:	P0095456, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 05/04/2012. The comment period ended on 06/03/2012.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

**1. Topic: None**

- a. Comment: No comments were received on this draft permit.
- b. Response: None



**Ohio**

**Environmental  
Protection Agency**

**PRELIMINARY PROPOSED**

**Division of Air Pollution Control  
Title V Permit**

for

**Cuyahoga Regional Sanitary Landfill**

Facility ID:	1318247813
Permit Number:	P0095456
Permit Type:	Renewal
Issued:	6/12/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Title V Permit
for
Cuyahoga Regional Sanitary Landfill

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## Authorization

Facility ID: 1318247813

Facility Description: Sanitary landfill.

Application Number(s): A0027023, A0027024, A0042600

Permit Number: P0095456

Permit Description: Title V renewal permit, including Minor Modification, for Cuyahoga Regional Sanitary Landfill. The permit includes emissions units F010 (material handling operations), F011 (paved and unpaved roadways), F012 (storage piles), and P001 (closed MSW landfill, with active C&DD operations, equipped with a landfill gas collection and control system with one open flare).

Permit Type: Renewal

Issue Date: 6/12/2012

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number: P0095455

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

Cuyahoga Regional Sanitary Landfill  
6640 Cochran Rd.  
Solon, OH 44139

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Cleveland Division of Air Quality  
2nd Floor  
75 Erieview Plaza  
Cleveland, OH 44114  
(216)664-2297

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 Cleveland Division of Air Quality. 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



## **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 Cleveland Division of Air Quality.

*(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. 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 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
- (2) 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. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (3) 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.

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.)**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.

**25. 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))*



**26. 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).

**27. 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))*

**28. 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.

## **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 landfill site and the gas collection system (one flare) are owned and operated by the Cuyahoga Regional Sanitary Landfill (Ohio EPA premise number 1318247813). A second independent company, MM Cuyahoga Energy LLC (Ohio EPA premise number 1318538151) owns and operates 4 internal combustion engines, also located on this facility's site. The 4 internal combustion engines (2 engines in tandem) are used to drive 2 generators which in turn produce electricity. The engines also serve as the control system for the non-methane organic compound emissions generated by the landfill. Whenever the non-methane organic compound emissions are vented to the 4 internal combustion engines, then the non-methane emissions will be controlled in accordance with the terms and conditions specified in the MM Cuyahoga Energy LLC Title V permit.
3. For the purposes of Title V permitting and determining the applicability of New Source Review requirements, the U.S. EPA considers this facility and the facility operated by MM Cuyahoga Energy LLC (Ohio EPA premise number 1318538151) to be one facility.

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



1. F010

Operations, Property and/or Equipment Description:

Material handling operations comprised of truck dumping, soil (cover) material dumping, and compacting/cover activities

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI #13-3523 issued October 12, 2000)	Fugitive particulate matter (PM) emissions shall not exceed 9.97 lbs/hr and 14.16 tons/year.  Fugitive particulate matter of 10 microns or less (PM <sub>10</sub> ) emissions shall not exceed 0.78 lb/hr and 3.19 tons/year.  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)a).
b.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3 minute average.
c.	OAC rule 3745-17-08(B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures for the material handling operation(s) for the purpose of ensuring compliance with the applicable requirements. In accordance with the permittee's permit application, the

permittee has committed to reducing the drop height of the front end loader and the application of water to ensure compliance.

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

- b. For each material handling operation, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform daily inspections of such operations.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (3) The permittee may, upon receipt of written approval from the Cleveland Division of Air Quality (Cleveland DAQ), 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 term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

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

- a. the date and reason any required inspection was not performed;
- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
- c. the dates the control measure(s) was (were) implemented; and

- d. on a calendar quarter basis, the total number of days the control measure(s) were implemented.

The information in d)(4)d. shall be kept separately for each material handling operation, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

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

- a. the construction debris dumping rate processed each day;
- b. the application rate of water;
- c. the name of the equipment operator responsible for the treatment; and,
- d. the general weather conditions for each day, i.e., with respect to precipitation, wind speed, and wind direction.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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, which was to be performed as a result of an inspection, was not implemented.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

f) Testing Requirements

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

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

b. Emission Limitation:

Fugitive particulate matter (PM) emissions shall not exceed 9.97 lbs/hr and 14.16 tons/year.

Fugitive particulate matter of 10 microns or less (PM<sub>10</sub>) emissions shall not exceed 0.78 lb/hr and 3.19 tons/year.

Applicable Compliance Method:

Compliance with the PM and PM<sub>10</sub> emission limits shall be based on calculations using construction debris dumping rates and emission factors in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 for material handling operation (Section 13.2.4) and bulldozing (Section 11.9) and multiplying the total by a control efficiency of 50%. Should further updates in AP-42 occur, the most current equations for material handling shall be used.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 13-3523, issued on October 12, 2000: f)(1)a.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



**2. F011,**

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

paved and unpaved roadways/parking for C&DD 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
	<b>Paved Roadways and Parking Areas</b>	
a.	OAC rule 3745-31-05(A)(3)  (PTI# P0109376 issued February 14, 2012)	Fugitive particulate matter of 10 microns or less (PM <sub>10</sub> ) emissions shall not exceed 0.45 ton/year.  Fugitive particulate matter (PM) emissions shall not exceed 2.26 tons/year.  no visible emissions of fugitive dust except for one minute during any 60-minute period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See b)(2)a., b)(2)c. through b)(2)e. and b)(2)g. below.)
b.	OAC rule 3745-17-07 (B)(4)	The visible fugitive dust emission limitation specified by this rule is less stringent than the visible fugitive dust emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08 (B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	<b>Unpaved Roadways and Parking Areas</b>	
d.	OAC rule 3745-31-05(A)(3)  (PTI P0109376 issued February 14, 2012)	Fugitive particulate matter of 10 microns or less (PM <sub>10</sub> ) emissions shall not exceed 6.26 tons/ year.  Fugitive particulate matter (PM) emissions shall not exceed 23.20 tons/year.  no visible emissions of fugitive dust except for 3 minutes during any 60-minute period  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See b)(2)b. through b)(2)g. below.)
e.	OAC rule 3745-17-07(B)(5)	The visible fugitive dust emission limitation specified by this rule is less stringent than the visible fugitive dust emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-08(B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of water or sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of water at sufficient treatment frequencies to

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

- c. 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 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.
- d. 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.
- e. 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.
- f. Any unpaved roadway or parking area that is subsequently paved, will require compliance with the terms and conditions for paved roadways and parking areas.
- g. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform daily inspections of all paved and unpaved roadway segments and parking areas.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0109376]

- (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 term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0109376]

- (3) The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0109376]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports to the Cleveland DAQ 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 term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0109376]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0109376]

f) Testing Requirements

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

a. Emission Limitations: for Paved Roadways and Parking Areas

Fugitive particulate matter of 10 microns or less (PM<sub>10</sub>) emissions shall not exceed 0.45 ton/year.

Fugitive particulate matter (PM) emissions shall not exceed 2.26 tons/year.

Applicable Compliance Method:

Compliance with fugitive PM and PM<sub>10</sub> 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 1/11) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used. These emission limits in the permit were based on a maximum of 19,094 vehicle miles traveled per year, and a 80% control efficiency for PM and PM<sub>10</sub>.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)  
PTI# P0109376]

b. Emission Limitation: for Paved Roadways and Parking Areas

No visible emissions of fugitive dust from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible emissions limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)  
PTI# P0109376]

c. Emission Limitations: for Unpaved Roadways and Parking Areas

Fugitive particulate matter of 10 microns or less (PM<sub>10</sub>) emissions shall not exceed 6.26 tons/year.

Fugitive particulate matter (PM) emissions shall not exceed 23.20 tons/year.

Applicable Compliance Method:

Compliance with fugitive PM and PM<sub>10</sub> limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for



unpaved roads shall be used. These emission limits in the permit were based on a maximum of 42,432 vehicle miles traveled per year, and a 75% control efficiency for PM and PM<sub>10</sub>.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)  
PTI# P0109376]

d. Emission Limitation: for Unpaved Roadways and Parking Areas

No visible emissions of fugitive dust from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible emissions limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)  
PTI# P0109376]

g) Miscellaneous Requirements

(1) None.



3. F012,

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

Wind erosion from storage piles

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
	<b>load in and load out of storage piles</b>	
a.	OAC rule 3745-31-05(A)(3)  (PTI #13-3523 issued October 12, 2000)	Fugitive particulate matter (PM) emissions shall not exceed 0.025 ton/year.  Fugitive PM <sub>10</sub> emissions shall not exceed 0.012 ton/year.  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See b)(2)a. through b)(2)c. below.)  No visible emissions of fugitive dust except for one minute during any 60-minute period.
b.	OAC rule 3745-17-07(B)(6)	The visible fugitive dust emission limitation specified by this rule is less stringent than the visible fugitive dust emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).



	<b>Wind erosion from storage piles</b>	
e.	OAC rule 3745-31-05(A)(3)  (PTI #13-3523 issued October 12, 2000)	Fugitive particulate matter (PM) emissions shall not exceed 0.025 ton/year.  Fugitive PM <sub>10</sub> emissions shall not exceed 0.012 ton/year.  best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)a, and b)(2)d through b)(2)f. below);  No visible emissions of fugitive dust except for one minute during any 60-minute period.
f.	OAC rule 3745-17-07(B)(6)	The visible fugitive dust emission limitation specified by this rule is less stringent than the visible fugitive dust emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	OAC rule 3745-17-08(B), (B)(6)	The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are:

Soil piles to be used for cover material

- b. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s application, the permittee has committed to reduce the drop height of the front end loader and treat all piles with water to ensure compliance.

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

- c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that

the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

- d. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to maintain as low a pile height as possible to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.
- 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 requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
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all	daily
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[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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all	daily
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[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
all	daily

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (6) The permittee may, upon receipt of written approval from the Cleveland DAQ, 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 term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

- (7) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and

- d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(7)d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports to the Cleveland DAQ 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 term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

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

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

f) Testing Requirements

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

- a. Emission Limitation:

No visible emissions of fugitive dust except for one minute during any 60-minute period.

- a. Applicable Compliance Method:

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the

modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

b. Emission Limitation: from load in and load out of the piles

Fugitive particulate matter (PM) emissions shall not exceed 0.025 ton/year.

Fugitive PM<sub>10</sub> emissions shall not exceed 0.012 ton/year.

Applicable Compliance Method-

Compliance with the PM and PM<sub>10</sub> emission limits shall be based on calculations using emission factors, Section 13.2.4, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (11/06) for load-in/out of the storage piles and multiplying the total by a control efficiency of 50%. Should further updates in AP-42 occur, the most current equations for storage piles shall be used.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

c. Emission Limitation- from wind erosion of the piles

Fugitive particulate matter (PM) emissions shall not exceed 0.025 ton/year.

Fugitive PM<sub>10</sub> emissions shall not exceed 0.012 ton/year.

Applicable Compliance Method-

Compliance with the PM and PM<sub>10</sub> emission limits shall be based on calculations using emission factors, Section 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (11/06) for industrial wind erosion and multiplying the total by a control efficiency of 50%. Should further updates in AP-42 occur, the most current equations for wind erosion shall be used.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI #13-3523]

g) Miscellaneous Requirements

- (1) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirement is as stringent as or more stringent than the testing requirement contained in Permit to Install # 13-3523, issued on October 12, 2000: f)(1)a.. The testing requirement contained in the above-referenced Permit to Install is subsumed into the testing requirement of this operating permit, so that compliance with this requirement constitutes compliance with the testing requirement in the Permit to Install.

[Authority for term: OAC rule 3745-77-07(A)(3)(a)(ii)]



4. P001, Landfill w/ collection/control sys. inc. fug. LFG

Operations, Property and/or Equipment Description:

Closed MSW landfill including active C&DD operations equipped with a landfill gas collection and control system (GCCS) with one open flare

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Chapter 3745-76	See b)(2)a. through b)(2)e. below.
b.	40 CFR Part 60, Subpart Cc	The requirements specified in this rule are equivalent to the requirements specified in OAC Chapter 3745-76.
c.	40 CFR Part 63, Subpart AAAA	See b)(2)f. below.
d.	40 CFR Part 63 Subpart A	Table 1 to Subpart AAAA of 40 CFR Part 63- Applicability of General Provisions to Subpart AAAA

(2) Additional Terms and Conditions

The design, construction, and siting of the gas extraction wells and gas collection system shall be in accordance with Ohio's Chapter 111(d) plan for existing MSW landfills as approved by the USEPA, the approved Gas Collection and Control System (GCCS) Design Plan or any alternatives in the GCCS Design Plan approved by the Director of Ohio EPA and standard industry methods and practices currently in use. The gas collection system shall:

i. be designed to handle the maximum expected gas flow rate, as calculated pursuant to OAC rule 3745-76-10(A)(1), from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

- ii. collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active, or 2 years or more if closed or at final grade;
  - iii. collect gas at a sufficient extraction rate;
  - iv. be designed to minimize off-site migration of subsurface gas; and
  - v. meet all other specifications for active collection systems specified in OAC rule 3745-76-14.
- b. For landfill gas collected and routed to the facility's open flare, which shall be designed and operated in accordance with the following requirements as established in OAC rule 3745-76-15:
- i. Flares shall be designed for and operated with no visible emissions as determined by the methods specified in f)(1)b. of this permit, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
  - ii. Flares shall be operated with a flame present at all times, as determined by the procedures specified in d)(2) of this permit.
  - iii. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in f)(1)c. of this permit.
  - iv. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in f)(1)d. of this permit, less than 18.3 m/sec (60 ft/sec), except as provided below.
  - v. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in f)(1)d. of this permit, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scf (1000 Btu/scf).
  - vi. Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by methods specified in f)(1)d. of this permit, less than the velocity,  $V_{max}$ , as determined by the method specified in f)(1)e. of this permit, and less than 122 m/sec (400 ft/sec) are allowed.
  - vii. Air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{max}$ , as determined by the method specified in f)(1)f. of this permit.

Flares used to comply with OAC Chapter 3745-76 requirements shall be steam-assisted, air-assisted, or nonassisted.

- c. The equipment that constitutes the GCCS shall be properly maintained and kept in good operating condition at all times.
- d. The collection and control system shall be operated in accordance with the applicable provisions specified in OAC rules 3745-76-08, 3745-76-10, and 3745-76-11.
- e. The collection and control system may be capped or removed provided that all of the following conditions are met:
  - i. The landfill shall be a closed landfill as defined in OAC rule 3745-76-01(B)(4). A closure report shall be submitted to the Director as provided in OAC rule 3745-76-12(D).
  - ii. The collection and control system shall have been in operation a minimum of 15 years from when the first well was installed and put into operation.
  - iii. Following the procedures specified in OAC rule 3745-76-09(B), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on 3 successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.
- f. The permittee shall comply with the applicable Standards and General Continuing Compliance requirements under 40 CFR Part 63, Subpart AAAA, including the following sections:

63.1955(a)(2)	Comply with the requirements of the EPA approved or effective State plan that implements 40 CFR Part 60, subpart Cc.
63.1955(b)	Comply with the requirements in 63.1960 through 63.1985 and Table 1 of the General Provisions if required to install a collection and control system.
63.1960	Determine compliance through performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence.  Develop and implement a written SSM plan according to 40 CFR 63.6(e)(3).
63.1965	Definition of a "deviation" for the purposes of landfill monitoring and SSM plans.
63.1975	Demonstrating compliance through 3 hour block average calculations.

## c) Operational Restrictions

- (1) The gas collection system shall be operated such that gas is collected from each area in the MSW landfill where:
  - a. municipal solid waste has been placed for 5 years or more; or
  - b. acceptance of municipal solid waste has ceased for at least 2 years.

The wells serving the gas collection system shall be placed in accordance with the facility's approved design plan. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of 2 years or more. Each well shall be installed as a measure to abate or minimize the migration of explosive gas when the Director orders the permittee to perform such measures.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(A)]

- (2) The gas collection system shall be operated in such a manner as to provide negative pressure at each wellhead except under the following conditions:
  - a. A fire or increased well temperature. (The permittee shall record instances when positive pressure occurs in efforts to avoid a fire.)
  - b. Use of a geomembrane or synthetic cover. (The permittee shall develop acceptable pressure limits in the design plan.)
  - c. A decommissioned well. (A well may experience a static positive pressure after shutdown to accommodate for declining flows. All design changes shall be approved by the Director of Ohio EPA.)

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(B)]

- (3) The permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius and with either a nitrogen level less than 20% or an oxygen level less than 5%. The permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit the anaerobic decomposition by killing methanogens.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(C)]

- (4) The permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill.

To determine whether this level is exceeded, the permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The permittee may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific

deviations from the thirty meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

All changes to the surface emission monitoring (SEM) plan shall be approved by the Director of Ohio EPA.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(D)]

- (5) The permittee shall operate the system such that all collected gases are vented to a control system designed and operated in compliance with OAC rule 3745-76-07(B)(2)(c). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(E)]

- (6) The permittee shall operate the control system at all times when the collected gas is routed to the system.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(F)]

- (7) If monitoring demonstrates that the operational requirements in c)(2), c)(3) or c)(4) of this permit are not met, corrective action shall be taken as specified in d)(1)a. through d)(1)c. or d)(3)d.. If corrective actions are taken as specified in d), the monitored exceedance is not a violation of the operational requirements in c)(2), c)(3) or c)(4) of this permit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-76-08(G)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall operate and maintain a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

- a. Measure the gauge pressure in the gas collection header on a monthly basis.

Except for the 3 conditions specified in c)(2), if a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director for approval.

- b. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis (see f)(1)a. for the nitrogen or oxygen concentration sampling procedures.)

If a well exceeds one of the concentration levels specified in c)(3), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the

exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director for approval.

- c. Monitor the temperature of the landfill gas on a monthly basis.

If a well exceeds the temperature level specified in c)(3), action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Director for approval.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-10(A)(3) and 3745-76-10(A)(5)]

- (2) The permittee shall calibrate, maintain, and operate, according to the manufacturer's specification the following equipment:
- a. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
  - b. A device that records flow to or bypass of the flare. The permittee shall either:
    - i. calibrate and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
    - ii. secure the bypass line valve in the closed position with a car-seal or lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-11(C)]

- (3) The permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in d)(3)a. through d)(3)d. below. Any closed landfill that has no monitored exceedances of the operational standard in 3 consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 parts per million or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.
- a. The permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals (or a site-specific established spacing) for each collection area

on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the following specifications:

- i. The portable analyzer shall meet the instrument specifications provided in section 6 of Method 21 of Appendix A of 40 CFR Part 60, except that "methane" shall replace all references to VOC.
  - ii. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.
  - iii. To meet the performance evaluation requirements in section 6 of Method 21 of Appendix A of 40 CFR Part 60, the instrument evaluation procedures of section 8.1 of Method 21 of Appendix A of 40 CFR Part 60 shall be used.
  - iv. The calibration procedures provided in section 8.1.1.1 of Method 21 of Appendix A of 40 CFR Part 60 shall be followed immediately before commencing a surface monitoring survey.
- b. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.
  - c. Surface emission monitoring shall be performed in accordance with section 8.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during favorable meteorological conditions.
  - d. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified below shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirement specified in c)(4).
    - i. The location of each monitored exceedance shall be marked and the location recorded.
    - ii. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.
    - iii. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in d)(3)d.v shall be taken, and no further monitoring of that location is required until the action specified in d)(3)d.v has been taken.
    - iv. Any location that initially showed an exceedance but has a methane concentration less than 500 parts per million methane above background

at the 10-day re-monitoring specified in d)(3)d.ii and d)(3)d.iii shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in d)(3)d.iii or d)(3)d.v shall be taken.

- v. For any location where monitored methane concentration equals or exceeds 500 parts per million above background 3 times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance.
- vi. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Director for approval.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-10(C)]

- (4) The permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-10(C)(5)]

- (5) The permittee shall keep up-to-date, readily accessible, on-site records of the design capacity report which triggered OAC rule 3745-76-07(B), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(A)]

- (6) The permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed below as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.
  - a. The maximum expected gas generation flow rate as calculated in OAC rule 3745-76-10(A)(1). The permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Director.
  - b. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in OAC rule 3745-76-14(A).
  - c. The flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in OAC rule 3745-76-15; continuous records of the flare pilot

flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame was absent.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(B)(1) and 3745-76-13(B)(4)]

- (7) The permittee shall keep up-to-date, readily accessible continuous records of the gauge pressure in the gas collection header, nitrogen or oxygen concentration in the landfill gas, and temperature of the landfill gas as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-11(A) and 3745-76-13(C)]

- (8) The permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(C)(2)]

- (9) The permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(C)(4)]

- (10) The permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. The permittee shall also keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(D)(1)]

- (11) The permittee shall keep up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in c) of this permit, the reading in the subsequent month, whether or not the second reading is an exceedance, and the location of each exceedance.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-13(E)]

- (12) The permittee shall, upon each visit to this closed facility, and at a minimum of once per month during normal operating conditions, visually inspect the flare and record whether or not any visible emissions are present and the duration of any visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (13) The GCCS shall be equipped with an auto-dial communication mechanism incorporated into it so that should a malfunction develop with the flare and/or blower system, the gas system technician will automatically be paged by phone.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (14) The permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed as provided in OAC rule 3745-76-07(B)(2)(e), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

Where,

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

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

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

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

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

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-09(B)]

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

63.1980	<p>Comply with the recordkeeping requirements of the EPA approved or effective State plan that implements 40 CFR Part 60, subpart Cc.</p> <p>Keep records in accordance with the General Provisions of 40 CFR Part 60 and Table 1 of Subpart AAAA.</p> <p>Keep records of the SSM plans and the SSM plan reports.</p>
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[Authority for term: OAC rules 3745-77-07(C)(1) and 40 CFR Part 63, Subpart AAAA]

## e) Reporting Requirements

- (1) The permittee shall submit an equipment removal report to the Director and the Cleveland DAQ 30 days prior to removal or cessation of operation of the control equipment.

The equipment removal report shall contain all of the following items:

- a. a copy of the closure report submitted in accordance with OAC rule 3745-27-12(D);
- b. a copy of the initial performance test report demonstrating that the 15-year minimum control period has expired; and
- c. dated copies of 3 successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

The Director may request such additional information as may be necessary to verify that all of the conditions for removal in OAC rule 3745-76-07(B)(2)(e) have been met.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-12(E)]

- (2) The permittee shall submit annual reports to the Cleveland DAQ that identify the following:
  - a. all periods of time during which the gauge pressure in the gas collection headers was positive (except for the 3 conditions specified in c)(2)) and the actual gauge pressure value for each time period;
  - b. all periods of time during which the nitrogen or oxygen concentrations in the landfill gas exceeded the allowable concentration levels and the actual nitrogen or oxygen concentrations for each time period;
  - c. all periods of time during which the temperature of the landfill gas exceeded the allowable temperature level and the actual landfill gas temperature for each time period;
  - d. all periods of time during which any open flare was in service and its associated heat sensing device was not in operation;
  - e. all periods of time during which any open flare was in service and the device that records flow to or bypass of the flare was not in service or not recording flow at the specified intervals; or all periods of time during which the control system bypass line valve was not secured in the closed position with a car-seal or a lock-and-key type configuration;
  - f. if monitoring the gas flow rate, all periods of time during which the gas stream is diverted from the control device through a bypass line;
  - g. all periods of time during which the control device was not operating for a period exceeding 1 hour;

- h. all periods of time during which the collection system was not operating in excess of 5 days;
- i. the location of each exceedance of the 500 parts per million methane concentration and the concentration recorded at each location for which an exceedance was recorded in the previous month; and
- j. the date of installation and the location of each well or collection system expansion added pursuant to OAC rules 3745-76-10(A)(3), 3745-76-10(B), and 3745-76-10(C)(4).

The reports shall be submitted by January 31 of each year.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-12(F)]

- (3) Any breakdown or malfunction of the landfill gas flare resulting in the emission of raw landfill gas from the GCCS for more than one hour shall be reported to the Cleveland DAQ within 1 hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emissions to the atmosphere.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-12(F)]

- (4) In the event of a potential emergency, such as a fire within the landfill, wells affected may be temporarily shut off, which could result in a positive gauge pressure. The Cleveland DAQ shall be notified within 1 working day of any shutdowns of any wells.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall submit semi-annual reports to the Cleveland DAQ which include an identification of any record showing that visible emissions were present from the flare. The reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6 calendar months.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

63.1980	<p>Comply with the reporting requirements of the EPA approved or effective State plan that implements 40 CFR Part 60, subpart Cc.</p> <p>Submit an annual report described in 40 CFR 60.757(f) every six months.</p>
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[Authority for term: OAC rules 3745-77-07(C)(1) and 40 CFR Part 63, Subpart AAAA]

## f) Testing Requirements

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

- a. The permittee shall determine the nitrogen or oxygen concentration level in the landfill gas in accordance with one of the following procedures:
- i. The nitrogen level shall be determined using Method 3c of Appendix A of 40 CFR part 60, unless an alternative test method is established as allowed by OAC rule 3745-76-07(B)(2)(a).
  - ii. Unless an alternative test method is established as allowed by OAC rule 3745-76-07(B)(2)(a), the oxygen level shall be determined by an oxygen meter using Method 3A of Appendix A of 40 CFR Part 60 except that:
    - (a) the span shall be set so that the regulatory limitation is between 20 and 50% of the span;
    - (b) a data recorder is not required;
    - (c) only 2 calibration gases are required, a zero and span, and ambient air may be used as the span;
    - (d) a calibration error check is not required; and
    - (e) the allowable sample bias, zero drift, and calibration drift are plus or minus 10%.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-08(C)]

b. Emission Limitation:

No visible emissions from each flare, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:

Compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-15(D)(1)]

c. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = k \sum_{i=1}^n C_i H_i$$

Where:

$k = \text{constant}, 1.740 \times 10^{-7} (1/\text{ppm})(\text{g mole/scm})(\text{MJ/kcal})$

Where the standard temperature for (g mole/scm) is 20 degrees C;

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

$C_i = \text{concentration of sample component } i \text{ in ppm on a wet basis, as measured for organics by reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-90;}$

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-15(D)(3)]

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-15(D)(4)]

- e. The maximum permitted velocity  $V_{\max}$ , for flares complying with b)(2)b.vi. of this permit shall be determined by the following equation:

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

Where:

$V_{\max} = \text{maximum permitted velocity, m/sec}$

28.8 = constant

31.7 = constant

$H_T = \text{the net heating value as determined in f)(1)c. of this permit.}$

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-15(B)(1)(d)]

- f. The maximum permitted velocity,  $V_{\max}$ , for air-assisted flares shall be determined by the following equation:

$$V_{\max} = 8.706 + 0.7084(H_T)$$



Where:

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

8.706 = constant

0.7084 = constant

$H_T$  = the net heating value as determined in f)(1)c. of this permit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-76-15(B)(1)(e)]

g) Miscellaneous Requirements

(1) None.