



State of Ohio Environmental Protection Agency

Street Address:

1800 WaterMark Drive  
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

P.O. Box 1049  
Columbus, OH 43216-1049

12/04/97

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

16-67-01-0007  
BFI of Ohio / Willowcreek Landfill  
Scott Herman  
30300 Pettibone Road  
Glenwillow, OH 44139

Dear Scott Herman:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Akron Air Pollution Control within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Akron Air Pollution Control.

Very truly yours,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA  
Jim Orlemann, DAPC Engineering  
Michael Ahern, DAPC PMU  
Akron Air Pollution Control  
Pennsylvania  
West Virginia



## Ohio EPA

State of Ohio Environmental Protection Agency

### TITLE V PERMIT

Issue Date: 12/04/97

### DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

BFI of Ohio / Willowcreek Landfill  
1043 State Route 225  
Atwater, OH 44201

of a Title V permit for Facility ID: 16-67-01-0007

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

F001 (Clay Storage Piles)

Fugitive dust emissions from clay storage piles.

F002 (Landfill Cells)

Fugitive dust emissions from landfill's NW and SW fill areas.

F003 (Roadways and Parking Areas)

Fugitive dust emissions from plant roadways and parking areas.

P001 (Enclosed Flare)

Combustion of gas extracted from the landfill.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Akron Air Pollution Control  
146 South High Street, Room 904  
Akron, OH 44308  
(330) 375-2480

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

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Director

# PART I - GENERAL TERMS AND CONDITIONS

## A. State and Federally Enforceable Section

### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## **4. Title IV Provisions**

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

## **5. Severability Clause**

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

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

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

## **8. 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.

## **9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

## **10. 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 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 3745-77-07.
- 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.

## **11. 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.

## **12. 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:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- 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 appropriate Ohio EPA District Office or local air agency in the following manner and with the following content:

- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before March 15th of each year during the permit term.
- ii. 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.
- iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

### **13. 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.

### **14. 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 3745-77-02(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).

### **15. 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.

## **16. 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, except that no such notice shall be required for changes that qualify as insignificant emission 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; and
- 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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

## **B. State Only Enforceable Section**

### **1. 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.

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### **3. Records Retention Requirements**

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.

### **4. 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.

### **5. 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).

### **6. 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.

**7. 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.

**8. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforcable Section

None

### B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

Z001 - existing landfill

Z002 - 10,000 gallon diesel fuel tank

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

2. The permittee shall not cause or allow any open burning at this location.
3. The permittee shall not initiate or allow any salvage operation to be conducted at this location without prior approval of the Ohio EPA. This excludes recycling or energy recovery, unless Ohio EPA approval is needed.
4. The permittee shall operate this facility in such a manner that it does not become offensive or objectionable to the public in violation of OAC rule 3745-15-07. If an odor resulting from construction activities is detected at the property line, the permittee shall institute all available mitigation measures. Odor mitigation measures deemed appropriate by the Director to protect the comfort, repose, health or safety of the public shall be implemented upon request.

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Clay Storage Piles (F001)

**Activity Description:** Fugitive dust emissions from clay storage piles.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Clay storage piles	OAC rule 3745-31-05 See Section A.VI.	25.0 tons/year of particulate matter 0.14 pound of particulate matter per ton of material stored See A.I.2.a, A.I.2.c and A.I.2.d below.
	OAC rule 3745-17-07	See A.I.2.b below.

**2. Additional Terms and Conditions**

- 2.a** There shall be no visible particulate emissions from any material storage pile except for a period of time not to exceed 1 minute during any 60-minute observation period.
- 2.b** The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.
- 2.c** The permittee shall control fugitive dust by periodically applying water or another suitable dust suppression chemical, as needed, to comply with the particulate emission limitations.
- 2.d** The permittee shall maintain a cover of vegetation on the clay storage piles which is adequate to minimize erosion and visible particulate emissions.

Facility Name: **BFI - Willowcreek Landfill**  
Facility ID: **16-67-01-0007**  
Emissions Unit: **Clay Storage Piles (F001)**

## **II. Operational Restrictions**

**None**

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which include the following information for the clay storage piles:
  - a. the date dust suppressants were applied to the clay storage pile(s);
  - b. the clay storage pile(s) that were treated with dust suppressants;
  - c. the application rate of water and any chemical additives (gallons of each per square yard); and
  - d. the name of the equipment operator responsible for the application of the dust suppressants.

## **IV. Reporting Requirements**

1. The permittee shall submit semi-annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the information required by A.III.1 above. These reports shall be submitted by January 31 and June 30 of each year and shall include information for the previous 6 calendar months.

## **V. Testing Requirements**

1. Compliance with the emission limitations in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

25.0 tons/year of particulate matter

Applicable Compliance Method:

Total Emissions = Load-In + (1 - Percent Area Vegetated) \* Wind Erosion + Load-Out

#### i. Load-in

Multiply the particulate emission factor of 0.0001 pound of particulates per ton of material by the maximum amount of clay material stored in all storage piles and convert to tons per year.

#### ii. Wind erosion

Multiply the particulate emission factor of 0.8130 pound of particulates per ton of material by the maximum amount of clay material stored in all storage piles and convert to tons per year, then multiply the result by 1 minus the percentage of area vegetated (85%).

#### iii. Load-out

Multiply the particulate emission factor of 0.0001 pound of particulates per ton of material by the maximum amount of clay material stored in all storage piles and convert to tons per year.

All particulate emission factors were obtained using RACM, Table 2.1.2-5.

### 1.b Emission Limitation:

0.14 pound of particulate matter per ton of material stored

Applicable Compliance Method:

Compliance shall be demonstrated by the summation of the particulate emission factors in Section A.V.1.a, i.e., 0.1222 pound of particulate matter per ton of clay material stored.

### 1.c Emission Limitation:

no visible emissions except 1 minute during any 60-minute observation period

Applicable Compliance Method:

Method 22 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B)(4)

Facility Name: **BFI - Willowcreek Landfill**

Facility ID: **16-67-01-0007**

Emissions Unit: **Clay Storage Piles (F001)**

## **VI. Miscellaneous Requirements**

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-1103, as issued on November 1, 1995: A.I and A.V.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

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

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Landfill Cells (F002)

**Activity Description:** Fugitive dust emissions from landfill's NW and SW fill areas.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Landfill cells	OAC rule 3745-31-05 See Section A.VI.	2.0 tons/year of particulate matter 0.059 ton of particulate matter per acre of cell per year  See A.I.2.b below.
	OAC rule 3745-17-07	See A.I.2.a below.

**2. Additional Terms and Conditions**

- 2.a** This emissions unit is exempt from any visible particulate emission limitation in accordance with OAC rule 3745-17-07(B)(7)(e).
- 2.b** The permittee shall control fugitive dust by periodically applying water or another suitable dust suppression chemical, as needed to comply with the particulate emissions limitation.

**II. Operational Restrictions**

**None**

### **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which include the following information for the landfill cells:
  - a. the date dust suppressants were applied to the landfill cell(s);
  - b. the landfill cell(s) that were treated with dust suppressants;
  - c. the application rate of water and any chemical additives (gallons of each per square yard); and
  - d. the name of the equipment operator responsible for the application of the dust suppressants.

### **IV. Reporting Requirements**

1. The permittee shall submit semi-annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the information required by A.III.1 above. These reports shall be submitted by January 31 and June 30 of each year and shall include information for the previous 6 calendar months.

### **V. Testing Requirements**

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

**1.a** Emission Limitation:

2.0 tons/year of particulate matter

Applicable Compliance Method:

Multiply the RACM, Table 2.1.2-5, particulate emission factor of 0.048 ton of particulates per acre per year by the maximum number of acres worked per year.

**1.b** Emission Limitation:

0.059 ton of particulate matter per acre of cell per year

Applicable Compliance Method:

Compliance shall be demonstrated by the RACM, Table 2.1.2-5, particulate emission factor of 0.048 ton of particulates per acre of cell per year.

### **VI. Miscellaneous Requirements**

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-1103, as issued on November 1, 1995: A.I and A.V.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

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

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Roadways and Parking Areas (F003)

**Activity Description:** Fugitive dust emissions from plant roadways and parking areas.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Roadways and parking areas, paved and unpaved	OAC rule 3745-31-05 See Section A.VI.	35 tons/year of particulate matter 2.71 pounds of particulate matter per vehicle mile traveled (VMT) See A.I.2.b and A.I.2.c below.
	OAC rule 3745-17-07	See A.I.2.a below.

**2. Additional Terms and Conditions**

- 2.a The emission limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.

## **2. Additional Terms and Conditions (continued)**

### **2.b** For unpaved roadways and parking areas:

- i. There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed 3 minutes during any 60-minute observation period.
- ii. The permittee shall apply dust suppressants to the unpaved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. Water shall be used as the dust suppressant, and the following equipment shall be used for the periodic applications: watering truck. The dust suppressant shall be applied to the unpaved surfaces, as needed to comply with the particulate emission limitation. This term and condition shall be waived during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
- iii. Since this landfill is closed to dumping and will no longer be accepting any material, and vehicular traffic is expected to be at a minimum, and because this emissions unit is not located in an Appendix A area, the permittee will not be required to develop a more detailed evaluation plan for determining when water or other suitable dust suppressant applications must be employed on the road surfaces and parking areas.
- iv. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.
- v. A maximum speed limit of 5 miles per hour shall be posted and enforced on the property.
- vi. Open-bodied vehicles transporting materials likely to become airborne shall be covered at all times.

## **2. Additional Terms and Conditions (continued)**

### **2.c** For paved roadways and parking areas:

- i. There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed 1 minute during any 60-minute observation period.
- ii. The permittee shall sweep the paved roadways and parking areas to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic. The following equipment shall be used to sweep the roadways and parking areas: sweeper trucks with water suppression. The paved surfaces shall be swept, as necessary to comply with the particulate emissions limitation. The permittee shall not be required to sweep during wet conditions when there is sufficient moisture to prevent visible emissions of fugitive dust.
- iii. Since this landfill is closed to dumping and will no longer be accepting any material, and vehicular traffic is expected to be at a minimum, and because this emissions unit is not located in an Appendix A area, the permittee will not be required to develop a more detailed evaluation plan for determining when water or other suitable dust suppressant applications must be employed on the road surfaces and parking areas.
- iv. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.
- v. A maximum speed limit of 15 miles per hour shall be posted and enforced on the property.
- vi. Open bodied vehicles transporting materials likely to become airborne shall be covered at all times.

## **II. Operational Restrictions**

**None**

## **III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which include the following information for the unpaved roadways and parking areas:
  - a. the date dust suppressants were applied to the unpaved surfaces;
  - b. the portions of unpaved surfaces that were treated with dust suppressants; and
  - c. the application rate of water and any chemical additives (gallons of each per square yard).

**III. Monitoring and/or Record Keeping Requirements (continued)**

2. The permittee shall maintain records which include the following information for the paved roadways and parking areas:
  - a. the date the paved surfaces were swept; and
  - b. the portions of the paved surfaces that were swept.

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

1. Compliance with the emission limitations in Sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

35 tons/year of particulate matter

Applicable Compliance Method:

Total Emissions = Paved Emissions + Unpaved Emissions

Paved Emissions:

Weighted emission factor: 0.04 pound per VMT

Unpaved Emissions:

Weighted emission factor: 2.16 pounds per VMT

Multiply the maximum number of miles traveled per year by the appropriate particulate emission factor and convert to tons per year.

All weighted particulate emission factors are based on the types of vehicles using the roadways and the applicable equations in RACM, Section 2.1.1 and AP-42, 5th edition, Sections 13.2.1 and 13.2.2.

## **V. Testing Requirements (continued)**

### **1.b** Emission Limitation:

2.71 pounds of particulate matter per VMT

Applicable Compliance Method:

Compliance with the emission limitation will be demonstrated by the derived emission factors of 0.04 pound of particulate per VMT on paved surfaces and 2.16 pounds of particulate per VMT on unpaved surfaces.

All weighted particulate emission factors are based on the types of vehicles using the roadways and the applicable equations in RACM, Section 2.1.1 and AP-42, 5th edition, Sections 13.2.1 and 13.2.2.

## **VI. Miscellaneous Requirements**

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-1103, as issued on November 1, 1995: A.I, A.III, and A.V.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

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

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

**Part III - Terms and Conditions for Emissions Units**

**Emissions Unit ID:** Enclosed Flare (P001)

**Activity Description:** Combustion of gas extracted from the landfill.

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Landfill gas collection and control system	OAC rule 3745-31-05 See Section A.VI.	2.18 lbs/hr NMOC 5.92 lbs/hr NOx 3.24 lbs/hr SO2 29.61 lbs/hr CO 6.96 lbs/hr HCl 0.01 lb/hr benzene 0.03 lb/hr vinyl chloride
	OAC rule 3745-18-06	See A.I.2.a below.
	OAC rule 3745-21-08	See A.I.2.a below.

**2. Additional Terms and Conditions**

- 2.a The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05.

## **2. Additional Terms and Conditions (continued)**

### **2.b Gas Collection System:**

Design, construction and siting of the gas extraction wells and collection system shall be in accordance with the CLD and Lewis (BFI of Ohio) PTI application, and standard industry methods and practices currently in use. In addition, the gas collection system shall:

- i. be designed to handle the maximum expected gas flow rate over the lifetime of the gas control or treatment system equipment from the entire area of the landfill that warrants control over the equipment lifetime;
- ii. collect gas from each area of the landfill in which refuse has been placed for a period of 2 years or more when the adjacent gas monitoring probes indicate offsite migration; and
- iii. collect gas at a sufficient extraction rate.

**2.c** The collected gas shall be routed to a control system designed and operated within the parameters demonstrated in the performance test to reduce NMOCs by 98 weight-percent, at maximum inlet concentration. The NMOC concentration shall be determined by Method 25.

**2.d** All landfill gas collected shall be directed to the flare station.

**2.e** The equipment that constitutes the gas collection and control system shall be properly maintained and kept in good operating condition at all times.

**2.f** Drawings of the landfill gas collection system, as built, shall be submitted to the Ohio EPA Northeast District Office within 90 days after the issuance of this permit and shall be maintained on site. The drawings shall include locations of wells and trenches, well depths, pipe lengths, diameters, condensate traps, layout of the system, and other relevant information.

## **II. Operational Restrictions**

1. Whenever the flare is in operation, a temperature of at least 1400 degrees F (or higher temperature needed to ensure a 98 weight-percent destruction of the NMOCs), measured by the temperature indicator, must be maintained.
2. The total quantity of landfill gas burned in the flare system shall not exceed 3.91 million cubic feet per day.
3. If the temperature monitor detects a no flame condition which cannot be immediately restarted, the system shall automatically shut down the flow of landfill gas.
4. All recording devices shall be synchronized based on the time of day.

Facility Name: **BFI - Willowcreek Landfill**

Facility ID: **16-67-01-0007**

Emissions Unit: **Enclosed Flare (P001)**

## **II. Operational Restrictions (continued)**

5. The skin temperature of the flare shroud within four feet of all the source test ports shall not exceed 250 degrees Fahrenheit. If a heat shield is required to meet the requirement, its design shall be approved by the Ohio EPA prior to its construction. The heat shield, if required to meet the temperature requirement, shall be in place whenever a source test is conducted for the Ohio EPA.
6. The gas collection system shall be operated at negative pressure to ensure that all landfill gas is directed to the flare station as required by A.1.2.d above.

## **III. Monitoring and/or Record Keeping Requirements**

1. This facility shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature in the combustion device. This monitor shall have an accuracy of +/- 1 percent of the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. This facility shall operate and maintain a continuous gas flow monitor and recorder which measures and records the gas flow to the control device at least every 15 minutes. The gas flow monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
3. The permittee shall install a sampling port at each well and measure and record the gauge pressure in the gas collection header on a monthly basis.

## **IV. Reporting Requirements**

1. Any breakdown or malfunction of the landfill gas flare resulting in the emission of raw landfill gas shall be reported to the Ohio EPA within one hour after the occurrence, or as soon as reasonably possible, and immediate remedial measures shall be undertaken to correct the problem and prevent further emission to the atmosphere.
2. 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 negative gauge pressure. The Ohio EPA field office shall be notified within one working day of any shutdowns of any wells.

#### **IV. Reporting Requirements (continued)**

3. The permittee shall submit semi-annual reports to the Ohio EPA field office for the following monitoring devices:
  - a. gauge pressure in the gas collection header;
  - b. temperature monitor and recorder; and
  - c. continuous gas flow monitor and recorder.

These reports shall contain as a minimum, the date, time of occurrence, cause, explanation and action taken for any times when the recorded result exceeded, or fell below, the allowable limitation. These reports shall be submitted by February 1, and August 1 of each year and shall address the data obtained during previous semi-annual period (July through December, and January through June, respectively).

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

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted 6 months prior to permit renewal.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NMOC, NO<sub>x</sub>, SO<sub>2</sub>, CO, HCl, benzene, and vinyl chloride.
  - c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rates:

for NMOC - Method 25C of 40 CFR Part 60, Appendix A;  
for NO<sub>x</sub> - Method 7 or 7E of 40 CFR Part 60, Appendix A;  
for SO<sub>2</sub> - Method 6 or 6C of 40 CFR Part 60, Appendix A;  
for CO - Method 10 of 40 CFR Part 60, Appendix A;  
for HCl - Method 26 or 26A of 40 CFR Part 60, Appendix A;  
for benzene - Method 18 of 40 CFR Part 60, Appendix A; and  
for vinyl chloride - Method 18 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Facility Name: **BFI - Willowcreek Landfill**

Facility ID: **16-67-01-0007**

Emissions Unit: **Enclosed Flare (P001)**

## V. Testing Requirements (continued)

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
5. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
  - 5.a Emission Limitation:  
2.18 lbs/hr NMOC  
  
Applicable Compliance Method:  
  
Compliance with the allowable mass emission rate for NMOC shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 25C.
  - 5.b Emission Limitation:  
5.92 lbs/hr NOx  
  
Applicable Compliance Method:  
  
Compliance with the allowable mass emission rate for NOx shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 7 or 7E.

**V. Testing Requirements (continued)**

**5.c** Emission Limitation:

3.24 lbs/hr SO<sub>2</sub>

Applicable Compliance Method:

Compliance with the allowable mass emission rate for SO<sub>2</sub> shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C.

**5.d** Emission Limitation:

29.61 lbs/hr CO

Applicable Compliance Method:

Compliance with the allowable mass emission rate for CO shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 10.

**5.e** Emission Limitation:

6.96 lbs/hr HCl

Applicable Compliance Method:

Compliance with the allowable mass emission rate for HCl shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 26 or 26A.

**5.f** Emission Limitation:

0.01 lb/hr benzene

Applicable Compliance Method:

Compliance with the allowable mass emission rate for benzene shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 18.

Facility Name: **BFI - Willowcreek Landfill**  
Facility ID: **16-67-01-0007**  
Emissions Unit: **Enclosed Flare (P001)**

## **V. Testing Requirements (continued)**

**5.g** Emission Limitation:

0.03 lb/hr vinyl chloride

Applicable Compliance Method:

Compliance with the allowable mass emission rate for vinyl chloride shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 18.

## **VI. Miscellaneous Requirements**

1. The following terms and conditions shall supersede all the air pollution control requirements for this emissions unit contained in permit to install 16-1155, as issued on September 21, 1994: A.I, A.II, A.III., A.IV, and A.V.

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

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

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

Facility Name: **BFI - Willowcreek Landfill**  
Facility ID: **16-67-01-0007**

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