



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
MORROW COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 01-08789

DATE: 10/16/2003

Harmony Environmental Ltd
Kitt Cooper
35 East Livingston Road
Columbus, OH 43215

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

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

cc: USEPA

CDO



**Permit To Install
Terms and Conditions**

**Issue Date: 10/16/2003
Effective Date: 10/16/2003**

FINAL PERMIT TO INSTALL 01-08789

Application Number: 01-08789
APS Premise Number: 0159000155
Permit Fee: **\$400**
Name of Facility: Harmony Environmental Ltd
Person to Contact: Kitt Cooper
Address: 35 East Livingston Road
Columbus, OH 43215

Location of proposed air contaminant source(s) [emissions unit(s)]:
**4871 County Road 25
Marengo, Ohio**

Description of proposed emissions unit(s):
Unpaved roadways.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

Harmony Environmental Ltd
PTI Application: 01-08789
Issued: 10/16/2003

Facility ID: 0159000155

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

6

Harmony Environmental Ltd
PTI Application: 01-08789
Issued: 10/16/2003

Facility ID: 0159000155

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	27.0

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F001 - Unpaved Roadways and Parking Areas	OAC rule 3745-31-05(A)(3)	Total particulate emissions (PE) shall not exceed 26.0 tons per year. No visible particulate emissions 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 Sections A.2.b through A.2.g)

2. Additional Terms and Conditions

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

unpaved roadways:

Haul Road

unpaved parking areas:

Parking Area
 Unloading Area

- 2.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 permit application, the permittee has

committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals to ensure compliance. at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.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 an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using water. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
- 2.e** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.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.
- 2.h** Application of waste oil as a dust suppressant is prohibited.
- 2.i** The permittee shall maintain a speed reduction of 15 mph to 10 mph for all unpaved roadways.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

unpaved roadways minimum inspection frequency

all daily

unpaved parking areas minimum inspection frequency

all daily

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The reports shall be submitted by:
 - a. July 15 and shall cover the period from January 1 until June 30 for each calendar year.
 - b. January 15 and shall cover the period from July 1 until December 31 for each calendar year.
3. If no deviations (excursions) are observed during a given period, the permittee shall submit a report which states that no deviations (excursions) occurred during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

E. Testing Requirements

1. Emission Limitation:

No visible particulate emissions except for 3 minutes during any 60-minute period

Compliance Method:

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

2. Emission Limitation:

Particulate emissions shall not exceed 26.0 tons per year.

Compliance Method:

The emission factor calculation for unpaved roadways and parking areas in AP-42 section 13.2.2 (September, 1998) shall be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

$$E = \frac{[k(s/12)^a(W/3)^b[(365-p)/365]]}{(M/0.2)^c}$$

Where

E = size-specific emission factor (lb/VMT)
s = silt content of road surface material (%) = 6.4%*
W = mean vehicle weight (tons) = 30
M = surface material moisture content (%) = 0.2%
a = 0.8 (dimension less constant)
b = 0.5 (dimension less constant)
c = 0.4 (dimension less constant)
k = 10 (dimension less constant) particle size multiplier
p = 145 no. of rain days per year

Therefore, E = 2.57 lbs particulate/VMT

Maximum travel = 99,000 VMT/year

(99,000 VMT/yr)(2.57 lbs/VMT) = 254,580 lbs of particulate/year

(254,580 lbs/year)(1 ton/2000 lbs) = 127.29 tons of particulate uncontrolled/year

Assume 80%** control for roadway watering and 15 to 10 mph speed reduction.
(127.29 tons/year) (.20) = 26.0 tons of particulate controlled/year

* The silt content of 6.4% for municipal solid waste operations, roadways, from Table 13.2.2-1, AP-42, September 1998.

** 80% control efficiency was obtained from Ohio EPA, RACM, Supplement No.1 for Fugitive Dust Sources, Table 2.1.1-3, August, 1983.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F002 - Construction Debris and Demolition Debris landfill activities including unloading area, dumping, spreading compacting, and covering.	OAC rule 3745-31-05(A)(3)	Total particulate emissions (PE) shall not exceed 1.0 tons per year. No visible particulate emissions except for 3 minutes during any 60-minute period. Use of best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Section A.2.)

2. Additional Terms and Conditions

- 2.a The landfill fugitive dust operations/sources that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:
 - i. waste dumping/unloading
 - ii. waste compaction
 - iii. soil excavation and handling
 - iv. covering of waste with soil
 - v. wind erosion from landfill surfaces
- 2.b The permittee shall employ best available control measures for the above-identified landfill fugitive dust operations/sources for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee maintains that the inherent moisture content of the materials involved in fugitive dust operations/sources is at a level which is more than sufficient to comply with all applicable requirements. If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall employ best available control measures

15

Harm

PTI A

Issued: 10/16/2003

Emissions Unit ID: **F002**

to ensure compliance.

Harm**PTI A****Issued: 10/16/2003**Emissions Unit ID: **F002**

- 2.c** 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 measures 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 fugitive dust operation/sources until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.e** The facility shall not accept for disposal any NESHAP Regulated Asbestos Containing Material (RACM) as defined in the NESHAP Regulation for Asbestos, 40 CFR Part 61, Subpart M, Section 141 amended November 20, 1990 or any subsequent revisions or as defined in any Environmental Protection Agency Interpretive Rules concerning the NESHAP Regulation for Asbestos. This includes: (a) Friable asbestos material, (b) Category I nonfriable asbestos containing material that has become friable, (c) Category I nonfriable asbestos containing material that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable asbestos containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.
- 2.f** Application of waste oil as a dust suppressant is prohibited.
- 2.g** There shall be no open burning in violation of Ohio Administrative Code 3745-19 at this facility.
- 2.h** The permittee shall be limited to accepting only C & DD waste materials as defined in Ohio Revised Code 3714.01(C).
- 2.i** This facility shall be limited to accepting no more than 624,000 tons of C & DD waste materials per calendar year.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

Emissions Unit ID: **F002**

1. The permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they retrievable within 4 hours. Either paper or electronic formats are acceptable.
2. Except as otherwise provided in this section, the permittee shall perform inspections of the landfill fugitive dust operations/sources in accordance with the following frequencies:

<u>landfill fugitive dust operations/sources</u>	<u>minimum inspection frequency</u>
a. waste dumping/unloading	once during each day of operation
b. waste compaction	once during each day of operation
c. soil excavation and handling	once during each day of operation
d. covering of waste with soil	once during each day of operation
e. wind erosion from landfill surfaces	once during each day of operation

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

The information in Section A.III.4.d shall be kept separately for each landfill fugitive dust operation/source identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

Harm

PTI A

Issued: 10/16/2003

Emissions Unit ID: **F002**

5. The permittee may, upon receipt of written approval from the Southeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
6. The permittee shall record the amount of C&DD waste deposited on a daily, monthly, and annual basis. This record shall detail the volume in yards or tons.

D. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The reports shall be submitted by:
 - a. July 15 and shall cover the period from January 1 until June 30 for each calendar year.
 - b. January 15 and shall cover the period from July 1 until December 31 for each calendar year.
3. If no deviations (excursions) are observed during a given period, the permittee shall submit a report which states that no deviations (excursions) occurred during that period. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation -

No visible particulate emissions except for 3 minutes during any 60-minute period.

Applicable Compliance Method -

Compliance with the visible emission limitations for the landfill activities identified above in Section A.2.a 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.
 - b. Emission Limitation -

Emissions Unit ID: F002

Total particulate emissions (PE) shall not exceed 1.0 tons per year.

Applicable Compliance Method -

The emission factor calculation for material handling in AP-42 section 13.2.4 (January, 1995) shall be utilized to determine compliance. Initial compliance has been determined using inputs representing current conditions as follows:

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

E = emission factor expressed in pounds (lbs) / ton

k = particle size multiplier (dimension less) = 0.74

U = mean wind speed expressed in miles per hour (MPH) = 11*

M = material moisture content (%) = 11.0**

$$E = 0.000607 \text{ pounds/ton}$$

Number of Transfer Points - 3 (load out from trucks, compaction of waste, and placement of cover material);

Tons Per year Throughput - 624,000 (2000 TPD*** @ 312 days of operation)

Total tons particulate controlled / year emitted is calculated as follows:

$$(E) \times (\text{No. Transfer Points}) \times (\text{Tons Per year Throughput}) \times (1 \text{ ton}/2000\text{lbs})$$

$$(0.000607 \text{ pounds/ton}) \times (3) \times (624,000 \text{ ton / year}) \times (1 \text{ ton}/2000\text{lbs}) = 0.56 \text{ tons per year}$$

Total particulate emissions from unloading of trucks and placement of cover material: 0.56 tons per year (round to 1 TPY).

* The highest average wind speed in the State Of Ohio. 11 miles per hour is worst case scenario from Mansfield, Ohio.

** The material moisture content of 11% for municipal solid waste operations, miscellaneous fill materials from Table 13.2.4-1, AP-42, January 1995.

***average tons of waste received per day. 2000 tons/day x 312 days of operation/year= 624,000 tons/year. 65,000 tons of cover material placed per year.

F. Miscellaneous Requirements

None