

Synthetic Minor Determination and/or **Netting Determination**
 Permit To Install **01-08537**

A. Source Description

Kurtz Brothers employs 4 diesel engines for grinding and screening yard waste, brush, leaves and wood pallets into compost and mulches.

B. Facility Emissions and Attainment Status

The 4 diesel engines as listed in the table have a combined calculated potential to emit of 118.25 tons Nox/yr. Franklin County is an attainment area for all criteria pollutants.

| Emission unit | EU ID # | Max. NOX lb/hr | PTE Nox ton/yr |
|---------------|---------|----------------|----------------|
| 800 hp diesel | F001 | 19.2 | 84.1 |
| 135 hp diesel | F002 | 4.1 | 17.95 |
| 45 hp diesel | F003 | 1.4 | 6.1 |
| 75 hp diesel | F004 | 2.3 | 10.1 |
| | | | 118.25 |

C. Source Emissions

Operational restrictions will limit hours for the 800 hp diesel engine to 6,000 per year and for the 135 and 75 hp diesel engines to 2,000 hours per year. The resulting NOx emissions, as listed in the table below, for the facility will be limited to less than of 100 tons/yr and below the Title V threshold. The operational restrictions on the two smaller diesel engines limit annual emissions from each to less than the 10 ton yr threshold for modeling to demonstrate that the acceptable increment is not be exceeded.

| Emission unit | EU ID | Max Nox lbs/hr | Restricted hrs | Permit NOx ton/yr |
|---------------|-------|----------------|----------------|-------------------|
| 800 hp diesel | F001 | 19.2 | 6,000 | 57.6 |
| 135 hp diesel | F002 | 4.1 | 2,000 | 4.1 |
| 45 hp diesel | F003 | 1.4 | 8,760 | 6.1 |
| 75 hp diesel | F004 | 2.3 | 2,000 | 2.3 |
| | | | | 70.1 |

D. Conclusion

Under the effective terms and operational restrictions of this permit to install, Kurtz Brothers will restrict the emission of criteria pollutants including nitrogen oxides to less than the Title V permitting threshold.



Street Address:

Mailing Address:

State of Ohio Environmental Protection Agency
Lazarus Gov. Center TEL: (614) 644-8020 FAX: (614) 644-2829

Lazarus Gov. Center

**RE: DRAFT PERMIT TO INSTALL
FRANKLIN COUNTY
Application No: 01-08537**

CERTIFIED MAIL

DATE: 5/7/2002

Groveport Composting Facility
Rob McCartney
2850 Rohr Rd
Groveport, OH 43125

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$4000** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

CC: USEPA

CDO

Mid-Ohio Regional Planning Commission



**Permit To Install
Terms and Conditions**

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

DRAFT PERMIT TO INSTALL 01-08537

Application Number: 01-08537
APS Premise Number: 0125042428
Permit Fee: **To be entered upon final issuance**
Name of Facility: Groveport Composting Facility
Person to Contact: Rob McCartney
Address: 2850 Rohr Rd
Groveport, OH 43125

Location of proposed air contaminant source(s) [emissions unit(s)]:

**2850 Rohr Rd
Groveport, Ohio**

Description of proposed emissions unit(s):

MCB soil screen.

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 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. 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 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule

3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(s) covered by this permit.

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 | 80.7 |
| NOX | 70.4 |
| SOX | 10.5 |
| CO | 17.0 |
| OC | 3.0 |

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> |
|---|---|
| F004 - Mark III power screen soil plant | OAC rule 3745-31-05(A)(3) OAC rule 3745-17-11 (B)(5)(a) OAC rule 3745-17-07 (A)(1) OAC rule 3745-17-07(B)(1) OAC rule 3745-31-05(D) (To avoid state air dispersion modeling pursuant to Engineering Guide number 69) |
| 75 hp diesel engine(1MMBTU/hr) | OAC rule 3745-31-05(A)(3) |

Grov

PTI

Emissions Unit ID: **F004**

Issued: To be entered upon final issuance

| <u>Applicable Emissions Limitations/Control Measures</u> | |
|--|--|
| Particulate emissions (PE) shall not exceed 5.1 lbs/hr and 5.1 tons/yr. | and 3745-31-05(D). PE from a small internal combustion engine shall not exceed 0.310 lb per MMBTU of actual heat input. |
| Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.b through A.2.d. | Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average. | NOx emissions shall not exceed 2.3 tons rolling, 12-month period. |
| Not applicable in non Appendix A area. | CO emissions shall not exceed 0.5 ton per rolling, 12-month period. |
| NOx emissions shall not exceed 2.3 lbs/hr. | SO2 emissions shall not exceed 0.2 ton per rolling, 12-month period. |
| CO emissions shall not exceed 0.5 lb/hr. | OC emissions shall exceed 0.2 ton per rolling, 12-month period. |
| SO2 emissions shall not exceed 0.2 lb/hr. | PE shall not exceed 0.2 ton per rolling, 12-month period |
| OC emissions shall not exceed 0.2 lb/hr. | |
| PE shall not exceed 0.2 lb/hr. | |
| See sections A.2.e, B.1, and B.2 below. | |
| Compliance with this rule also includes compliance with OAC rules 3745-17-11(B)(5)(a), 3745-17-07(A), 3745-18-06(G), | |

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Soil screening

2.b The permittee shall employ best available control measures for the above-identified material handling operation 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 perform the following control measure to ensure compliance:

| | |
|------------------------------------|------------------------|
| <u>material handling operation</u> | <u>control measure</u> |
|------------------------------------|------------------------|

| | |
|----------------|----------|
| Soil screening | moisture |
|----------------|----------|

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

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during the operation of the material handling operation until further observation confirms that use of the control measure is unnecessary.

2.d Implementation of the above-mentioned control measure 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 hourly combustion emissions of NOx, SO2, CO, OC and PE reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 2,000, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table, at any one facility:

Grov

PTI 1

Issued: To be entered upon final issuance

Emissions Unit ID: F004

| <u>Months</u> | <u>Maximum Allowable Cumulative Operating Hours</u> |
|---------------|---|
| 1 | 150 |
| 1-2 | 300 |
| 1-3 | 450 |
| 1-4 | 600 |
| 1-5 | 750 |
| 1-6 | 900 |
| 1-7 | 1150 |
| 1-8 | 1300 |
| 1-9 | 1450 |
| 1-10 | 1600 |
| 1-11 | 1750 |
| 1-12 | 2000 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

2. The diesel engine shall be operated with diesel fuel with a sulfur content less than 0.5% by weight.

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| <u>material handling operation</u> | <u>minimum inspection frequency</u> |
|------------------------------------|-------------------------------------|
|------------------------------------|-------------------------------------|

| | |
|----------------|-------|
| Soil screening | daily |
|----------------|-------|

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Ohio EPA, CDO, 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;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure;
 - c. the dates the control measure was implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure was implemented.

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

5. The permittee shall maintain a record of the sulfur content of each shipment of diesel fuel received for burning in this emissions unit.
6. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. the cumulative rolling, 12-month summation of operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours during each calendar month.

7. The operations log shall be maintained on site.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the annual operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.
2. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

Grov

PTI

Issued: To be entered upon final issuance

Emissions Unit ID: **F004**

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

3. The permittee shall submit a deviation report for each day when a fuel other than 0.5% sulfur diesel fuel was burned in this emissions unit. This report shall be submitted within 30 days after the deviation occurred.

E. Testing Requirements

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

- a. Emissions Limitations-
PE shall not exceed 5.1 lbs/hr per hour and 5.1 tons per rolling, 12-month period.

Applicable Compliance Method-

Compliance shall be based on calculated hourly emissions using a RACM emission factor for soil handling: $EF \text{ (lb/ton)} = 0.33 / (PE/100)^2$; $0.33 / (101/100)^2 = 0.34 \text{ lb/ton}$
 $0.34 \text{ lb/ton} * 15 \text{ tons/hr} = 5.1 \text{ lbs PM/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 5.1 \text{ tons/yr}$

- b. Emissions Limitation-
Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method-

If required, compliance shall be determined through visible emission observations performed in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996.

- c. Emissions Limitations-
Combustion emissions shall not exceed the following: NO_x emissions shall not exceed 2.3 lbs/hr and 2.3 tons/yr; CO emissions shall not exceed 0.5 lb/hr and 0.5 ton/yr; SO_x emissions shall not exceed 0.2 lb/hr and 0.2 ton/yr ; and OC emissions shall not exceed 0.2 lb/hr and 0.2 ton/yr ; and PE shall not exceed 0.2 lb/hr and 0.2 ton/yr.

Applicable Compliance Method-

Compliance with the emission limitations identified above for the diesel engine shall be determined by using the emission factors from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines" and the

Grov

PTI

Emissions Unit ID: **F004**

Issued: To be entered upon final issuance

rated capacity of the diesel engine (75 hp). The hourly emission rates are multiplied by 2,000 hours and converted to tons to obtain the annual emissions.

AP-42 Table 3.3-1 for combustion emissions from diesel engines

$0.031 \text{ lb NOx/hp-hr} * 75 \text{ hp} = 2.3 \text{ lb NOx/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 2.3 \text{ tons NOx/yr}$

$0.00668 \text{ lb CO/hp-hr} * 75 \text{ hp} = 0.5 \text{ lb CO/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.5 \text{ ton CO/yr}$

$0.00205 \text{ lb SOx/hp-hr} * 75 \text{ hp} = 0.15 \text{ lb SOx/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.15 \text{ ton SOx/yr}$

$0.00247 \text{ lb OC/hp-hr} * 75 \text{ hp} = 0.18 \text{ lb OC/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.18 \text{ ton OC/yr}$

$0.0022 \text{ lb PE/hp-hr} * 75 \text{ hp} = 0.16 \text{ lb PE/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.16 \text{ ton PE/yr}$

- d. Emissions Limitation-
Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method-

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- e. Emissions Limitation-
PE emissions from the small engine exhaust shall not exceed 0.310 lb per MMBtu of actual heat input.

Applicable Compliance Method-

Compliance with the emissions limitation for the diesel engine identified above shall be determined by using the emission factor for particulates from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines." This emission factor is 0.310 lb PM/MMBTU of fuel input for diesel fuel.

F. Miscellaneous Requirements

1. Terms in section A, B, C, D and E of this permit are federally enforceable.

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> |
|--|--------------------------------------|---|
| F005 -Material handling with load-in and load-out from storage piles (mulch, compost and soil) | OAC rule 3745-31-05(A)(3) | Particulate emissions (PE) shall not exceed 36.4 lbs/hr and 43.6 tons per rolling, 12-month period. |
| | OAC rule 3745-17-07(B)(1) | Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.b, A.2.c and A.2.f. |
| | OAC rule 3745-17-08(B) | Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average. |
| Wind erosion from storage piles. See Section A.2.a for identification of storage piles. | OAC rule 3745-31-05(A)(3) | Not applicable non-Appendix A area. |
| | | There shall be no visible PE except for a period of time not to exceed 1-minute during any 60-minute observation period from storage piles. |
| | | Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.d through A.2.f. |

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

Grov

PTI 1

Emissions Unit ID: **F005**

Issued: To be entered upon final issuance

Mulch piles
Soil piles
Compost piles

- 2.b** The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to employ inherent moisture to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measure shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during any such operation until further observation confirms that use of the measure is unnecessary.
- 2.d** The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to employ inherent moisture to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

B. Operational Restrictions

- 1. The maximum annual operating hours for of material handling shall not exceed 3,000, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table, at any one facility:

| <u>Months</u> | <u>Maximum Allowable Cumulative Operating Hours</u> |
|---------------|---|
| 1 | 200 |
| 1-2 | 400 |
| 1-3 | 600 |
| 1-4 | 800 |
| 1-5 | 1000 |
| 1-6 | 1200 |
| 1-7 | 1400 |
| 1-8 | 1600 |
| 1-9 | 1800 |
| 1-10 | 2000 |
| 1-11 | 2200 |
| 1-12 | 2400 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

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

| <u>storage pile identification</u> | <u>minimum load-in inspection frequency</u> |
|------------------------------------|---|
| Mulch piles | Daily, when operating |
| Soil piles | Daily, when operating |
| Compost piles | Daily, when operating |

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

| <u>storage pile identification</u> | <u>minimum load-out inspection frequency</u> |
|------------------------------------|--|
| Mulch piles | Daily, when operating |
| Soil piles | Daily, when operating |
| Compost piles | Daily, when operating |

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind

Grov

PTI 1

Issued: To be entered upon final issuance

Emissions Unit ID: **F005**

erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

| <u>storage pile identification</u> | <u>minimum wind erosion inspection frequency</u> |
|------------------------------------|--|
| Mulch piles | Daily, when operating |
| Soil piles | Daily, when operating |
| Compost piles | Daily, when operating |

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the Ohio EPA, Central 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.
7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where

snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

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

8. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. the cumulative rolling, 12-month summation of operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours during each calendar month.

9. The operations log shall be maintained on site.

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 deviation reports shall be submitted in accordance with the reporting requirements of the General terms and conditions of this permit.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the annual operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations-
PE shall not exceed 36.4 lbs/hr and 43.6 tons per rolling, 12-month period.

Issued: To be entered upon final issuance

Applicable Compliance Method-

Compliance shall be determined by the summing the calculated emission for material handling of mulch and with those emissions resulting from stockpiling of mulch and soils using the following equations:

1. Compost handling: $30 \text{ tons/hr} * 0.35 \text{ lb/ton} = 10.5 \text{ lbs PM/hr}$
 $10.5 \text{ lbs PM/hr} * 2,400 \text{ hr/yr} * 1 \text{ ton}/2,000 \text{ lb} = 12.6 \text{ tons PM/yr}$
- ii Mulch handling: $15 \text{ tons/hr} * 0.35 \text{ lb/ton} = 5.2 \text{ lbs PM/hr}$
 $5.2 \text{ lbs PM/hr} * 2,400 \text{ hrs/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 6.2 \text{ tons PM/yr}$
- iii. Yard waste: $30 \text{ tons/hr} * 0.35 \text{ lb/ton} = 10.5 \text{ lbs PM/hr}$
 $10.5 \text{ lbs PM/hr} * 2,400 \text{ hrs/ton} * 1 \text{ ton}/2,000 \text{ lbs} = 12.6 \text{ tons PM/yr}$
- iv. Emission calculation for soil handling and storage RACM Section 2.1.2., Equation 1
 $EF \text{ (lb/ton)} = 0.33 / (PE/100)^2$
 $0.33 / (101/100)^2 = 0.34 \text{ lb/ton}$
 $0.34 \text{ lb/ton} * 30 \text{ tons/hr} = 10.2 \text{ lbs/hr}$
 $10.2 \text{ lbs/hr} * 2,400 \text{ hrs/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 12.2 \text{ tons/yr}$
Annual emissions = $12.6 \text{ tons/yr} + 6.2 \text{ tons/yr} + 12.6 \text{ tons/yr} + 12.2 \text{ tons/yr} = 43.6 \text{ tons PM/yr}$

- c. Emissions limitation-
There shall be no visible particulate emissions except for a period of time not to exceed 1-minute during any 60-minute observation period from wind erosion of storage piles.

Applicable Compliance Method

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

- d. Emissions limitation-
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method

Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test

Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

F. Miscellaneous Requirements

1. The air contaminants emitted during material handling of yard waste and compost, as covered by this permit, shall not cause a public nuisance in violation of OAC rule 3745-15-07. Approval of this permit is based upon operation of this facility in a manner that reduces the generation of nuisance odors and particulate emissions. If the Central District Office determines through routine inspection or surveillance activities that objectionable odors or particulate emissions, this facility shall begin immediately to address the odor and/or particulate emissions and pursue resolution in an expeditious manner.
2. 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 facility 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 and federal 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

Grov

PTI /

Emissions Unit ID: **F006**

Issued: To be entered upon final issuance

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.

Grov

PTI

Emissions Unit ID: F006

Issued: To be entered upon final issuance

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> |
|---|--------------------------------------|---|
| F006 - Paved roadways and working pads. | OAC rule 3745-31-05(A)(3) | <p>Particulate emissions shall not exceed 1.8 tons per year.</p> <p>There shall be no visible particulate emissions except for a period of 1-minute during any 60 minute observation period from a paved roadway.</p> <p>Best available control measures shall be sufficient to minimize or eliminate visible emissions of fugitive dust. See A.2.a. and A.2.c. through A.2.h. below.</p> |
| Unpaved roadways and working pads | OAC rule 3745-31-05(A)(3) | <p>Particulate emissions shall not exceed 17.9 tons per year.</p> <p>There shall be no visible particulate emissions except for a period of 3-minutes during any 60 minute observation period from an unpaved roadway. See C.1., below.</p> <p>Best available control measures shall be sufficient to minimize or eliminate visible emissions of fugitive dust.</p> |

Grov

PTI

Issued: To be entered upon final issuance

See A.2.b. and A.2.c. through
A.2.h. below.

Emissions Unit ID: **F006**

Issued: To be entered upon final issuance

2. Additional Terms and Conditions

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

paved roadways:

Facility entrance and exit

paved staging areas:

Brush pile and compost grinding area
Pallet grinding and wood chip loadout area
Compost windrow area

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

unpaved roadways:

East lane to topsoil area
Access road to topsoil area

unpaved staging areas:

Topsoil blending and load out area

- 2.c** The permittee shall employ best available control measures on all paved roadways and staging areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to treat the paved roadways and parking areas by employing good housekeeping practices and applying water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.d** The permittee shall employ best available control measures on the unpaved roadways and staging 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 staging areas by employing water dust suppression and application of suitable dust suppression at sufficient treatment frequencies

Groveport Composting Facility

PTI Application 01-00527

Issue

Facility ID: 0125042428

Emissions Unit ID: **F006**

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

Issued: To be entered upon final issuance

- 2.e The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f Any unpaved roadway or staging area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or staging area that takes the characteristics of a paved roadway or staging 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 staging area that is paved shall be subject to the visible emission limitation for paved roadways and staging areas.
- 2.g 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.h Open-bodied vehicles owned by the Kurtz Brothers and 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.i Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.
- 2.j The use of used oil as a dust suppressant is prohibited per OAC rule 3745-279-82.

B. Operational Restrictions

1. A maximum speed limit of 10 miles per hour for vehicular traffic shall be posted and enforced on the roadways and staging areas of this facility.
2. The permittee shall comply with storm water control regulations in the application of water dust suppressants. In areas outside of the storm water retention pond drainage catch, the permittee may employ sweeping, vacuum sweeping or alternative control measures.

Grov

PTI /

Emissions Unit ID: F006

Issued: To be entered upon final issuance

C. Monitoring and/or Recordkeeping Requirements

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

| <u>paved roadways and staging areas</u> | <u>minimum inspection frequency</u> |
|---|-------------------------------------|
|---|-------------------------------------|

| | |
|---|--------|
| Entrance and exit | daily |
| Brush pile and compost grinding pad | daily |
| Pallet grinding and wood chip loadout pad | daily |
| Compost windrow pad | weekly |

| <u>unpaved roadways and staging areas</u> | <u>minimum inspection frequency</u> |
|---|-------------------------------------|
|---|-------------------------------------|

| | |
|------------------------------------|------------------|
| Gated east access lane | daily, when open |
| Access road to topsoil area | daily |
| Topsoil blending and load out area | 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 staging 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 Ohio EPA, Central 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.
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;
 - b. the dates the control measures were implemented; and

Groveport Composting Facility

PTI Application 01-00527

Issue

Facility ID: 0125042428

Emissions Unit ID: F006

c. 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 kept separately for (i) the paved roadways and staging areas and (ii) the unpaved roadways and staging areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

Grov

PTI

Emissions Unit ID: F006

Issued: To be entered upon final issuance

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 deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emissions Limitation-
Particulate emissions shall not exceed 1.8 tons per year from paved roadways.

Applicable Compliance Method-
Compliance shall be determined by the following calculations:

Paved entrance roadway and staging areas - AP-42 emission factor section 13.2.1

$$E = k(sL/2)^{0.65} (W/3)^{1.5} \text{ lbs/VMT}$$

k = particle size multiplier = 0.082 lb/VMT (PM-30 Table 13.2.1-1 AP-42)

sL = silt loading on road surface = 32 gm/m² (Table 13.2.1-2 landfill)

W = average vehicle weight (tons) = 8 (single axle); 13 (tri-axle); 1 (pickup)

$$E = 0.082(32/2)^{0.65} (8/3)^{1.5} = 0.082 * 6.06 * 1.5 = 0.75 \text{ lb/VMT (single axle)}$$
$$0.75 \text{ lb/VMT} * (2500 \text{ mile/yr}) * 1 \text{ ton}/2,000 \text{ lb} = 0.9 \text{ ton PM per year}$$

$$E = 0.082 * 6.06 * 1.8 = 0.9 \text{ lb/VMT (tri-axle)}$$
$$0.9 \text{ lb/VMT} * (1500 \text{ mile/yr}) * 1 \text{ ton}/2,000 \text{ lb} = 0.7 \text{ ton PM per year}$$

$$E = 0.082 * 6.06 * 0.64 = 0.32 \text{ lb/VMT (pick-up)}$$
$$0.32 \text{ lb/VMT} * (1224 \text{ mile/yr}) * 1 \text{ ton}/2,000 \text{ lb} = 0.2 \text{ ton PM per year}$$

Grov

PTI /

Issued: To be entered upon final issuance

Emissions Unit ID: **F006**

Annual emissions = 1.8 ton PM per year for paved roadways

Issued: To be entered upon final issuance

- b. Emissions Limitation-
Particulate emissions shall not exceed 17.9 tons per year from unpaved roadways.

Applicable Compliance Method-

Compliance shall be determined by the following calculations:

Unpaved access roads, compost and soil processing areas AP-42 emission factor section 13.2.2

$$E = (k(s/12)^{0.8} (W/3)^{0.5}/(M/0.2))^{0.4} \text{ lb/VMT}$$

k = particle size multiplier = 10 (PM-30 Table 13.2.2-2 AP-42)

s = surface material silt content = 6.4 % (supplied by permittee)

W = average vehicle weight (tons) = 20 (endloader); 16 (semi); 3 (pickup)

M = surface material moisture content = 1 % (Table 13.2.4-1)

$$E = 10(6.4/12)^{0.65} (16/3)^{0.5}/(1/0.2))^{0.4} * (365-120)/365 \text{ control efficiency-water}$$

$$E = 10(0.60) * (4.4) * (2.3/5)^{0.4} * (0.67) = 12.9 \text{ lbs/VMT (semi/triaxel)}$$

$$E = 10(0.60) * (4.4) * (2.6/5)^{0.4} * (0.67) = 13.6 \text{ lbs/VMT (endloader)}$$

$$E = 10(0.60) * (4.4) * (1/5)^{0.4} * (0.67) = 9.3 \text{ lb/VMT (pickup)}$$

Maximum miles traveled per year = 672 miles (loader); 1,800 miles (semi); 375 miles (pickup)

$$12.9 \text{ lb/VMT} * 1,800 \text{ miles/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 11.6 \text{ tons PM/yr (semi/triaxel)}$$

$$13.6 \text{ lb/VMT} * 672 \text{ miles/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 4.6 \text{ tons PM/yr (endloader)}$$

$$9.3 \text{ lb/VMT} * 375 \text{ miles/yr} * 1 \text{ ton}/2,000 \text{ lbs} = 1.74 \text{ ton PM/yr (endloader)}$$

Annual emissions = 17.9 tons PM per year from unpaved roadways

- c. Emissions limitation-
There shall be no visible emissions except for a period not to exceed 1-minute during any 60 minute observation period from paved roadways.

Applicable Compliance Method-

Compliance with the emission limitation for the paved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," 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.

- d. Emission limitation-
There shall be no visible emissions except for a period not to exceed 3-minutes during any 60 minute observation period from unpaved roadways.

Groveport Composting Facility

PTI Application 01-00527

Issue**Facility ID: 0125042428**Emissions Unit ID: **F006****Applicable Compliance Method-**

Compliance with the emission limitation for the unpaved roadways and parking areas shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," 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.

F. Miscellaneous Requirements

None

Grov
PTI

Emissions Unit ID: **F001**

Issued: To be entered upon final issuance

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

A. Applicable Emissions Limitations and/or Control Requirements

- 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.

| Operations, Property, and/or Equipment | <u>Applicable Rules/Requirements</u> |
|---|---|
| F001 - portable CBI grinder-30 tons/hr | OAC rule 3745-31-05(A)(3) |
| | OAC rule 3745-17-11 (B)(5)(b) |
| | OAC rule 3745-17-07(B) |
| | OAC rule 3745-17-07 (A)(1) |
| | OAC rule 3745-17-08 |
| w/800 hp diesel engine (6 MMBTU/hr) | OAC rule 3745-31-05(A)(3) |
| | OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for NOx emissions) |

Grov**PTI**Emissions Unit ID: **F001****Issued: To be entered upon final issuance**

| <u>Applicable Emissions Limitations/Control Measures</u> | 3745-17-07(A), 3745-18-06(G), and 3745-31-05(D). |
|--|---|
| Particulate emissions (PE) shall not exceed 0.74 lb/hr and 2.2 tons/yr from the grinder tub. | PE from a large bore engine exhaust stack shall not exceed 0.062 lb per MMBTU of actual heat input. |
| Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.b through A.2.d. | Visible PE from the exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average. | NOx emissions shall not exceed 57.6 tons per rolling, 12-month period. |
| Not applicable in non-Appendix A area. | CO emissions shall not exceed 14.4 tons per rolling, 12-month period. |
| NOx emissions shall not exceed 19.2 lbs/hr. | SO2 emissions shall not exceed 9.6 tons per rolling, 12-month period. |
| CO emissions shall not exceed 4.8 lbs/hr. | OC emissions shall not exceed 1.7 tons per rolling, 12-month period. |
| SO2 emissions shall not exceed 3.2 lbs/hr. | PE shall not exceed 1.7 tons per rolling 12-month period. |
| OC emissions shall not exceed 0.56 lb/hr. | |
| PE shall not exceed 0.56 lb/hr. | |
| See section A.2.e, B.1, and B.2 below. | |
| Compliance with this rule also includes compliance with OAC rules | 3745-17-11(B)(5)(b), |

Groveport Composting Facility

PTI Application 01-00527

Issue**Facility ID: 0125042428**Emissions Unit ID: **F001****2. Additional Terms and Conditions**

- 2.a** The material handling operation that is covered by this permit and subject to the above-mentioned requirements are listed below:

CBI grinder

- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation 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 perform the following control measure to ensure compliance:

material handling operation

CBI grinder

control measure

wet suppression

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

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measure 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 rules 3745-17-08 and 3745-31-05.
- 2.e** The hourly combustion emissions of NO_x, SO₂, CO, OC and PE reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 6,000, based upon a rolling, 12- month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation, following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table, at any one facility:

Maximum Allowable

Gro

PTI

Emissions Unit ID: F001

Issued: To be entered upon final issuance

| <u>Months</u> | <u>Cumulative Operating Hours</u> |
|---------------|-----------------------------------|
| 1 | 450 |
| 1-2 | 900 |
| 1-3 | 1350 |
| 1-4 | 1800 |
| 1-5 | 2250 |
| 1-6 | 2700 |
| 1-7 | 3450 |
| 1-8 | 3900 |
| 1-9 | 4350 |
| 1-10 | 5400 |
| 1-11 | 5250 |
| 1-12 | 6000 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

- The diesel engine shall be operated with diesel fuel with a sulfur content less than 0.5% by weight.

C. Monitoring and/or Recordkeeping Requirements

- Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| <u>material handling operation</u> | <u>minimum inspection frequency</u> |
|------------------------------------|-------------------------------------|
| CBI grinder | Daily, when operating |

- The above-mentioned inspections shall be performed during representative, normal operating conditions.
- The permittee may, upon receipt of written approval from the Ohio EPA, Central 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.
- The permittee shall maintain records of the following information:
 - the date and reason any required inspection was not performed;

Groveport Composting Facility

PTI A-111111-01 00527

Issue**Facility ID: 0125042428****Emissions Unit ID: F001**

- 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 measure was implemented;
- d. on a calendar quarter basis, the total number of days the control measure was implemented; and
 - e. the name of the person reporting each observation.

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

- 5. The permittee shall maintain a record of the sulfur content of each shipment of diesel fuel received for burning in this emissions unit.
- 6. The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. the cumulative rolling, 12-month summation of operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours during each calendar month.

- 7. The operations log shall be maintained on site.

D. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:
 - a. each day when visible emissions were observed, and at which location;
 - b. each day during which an inspection was not performed by the required frequency; and
 - c. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
- 2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the annual operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.

Grov**PTI**Emissions Unit ID: **F001****Issued: To be entered upon final issuance**

3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit a deviation report for each day when a fuel other than 0.5% sulfur diesel fuel was burned in this emissions unit. This report shall be submitted within 30 days after the deviation occurred.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations-
PE shall not exceed 0.72 lb/hr and 2.2 tons/yr from the tub grinder..

Applicable Compliance Method-
Compliance shall be based on processing yard waste at 30 ton/hr * 0.024 lb/ton = 0.72 lb PM/hr * 6,000 hr/1yr * 1 lb /2,000 ton = 2.2 tons PM/hr
 - b. Emissions Limitation-
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method-
If required, compliance shall be determined through visible emission observations performed in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996.
 - c. Emissions Limitation-
NOx emissions shall not exceed 19.2 lbs/hr and 57.6 tons per year; CO emissions shall not exceed 4.8 lbs/hr and 14.4 tons per year; SO2 emissions shall not exceed 3.2 lbs/hr and 9.6 tons per year; OC emissions shall not exceed 0.56 lb/hr and 1.7 tons per year; and PE shall not exceed 0.56 lb/hr and 1.7 tons per year in combustion gases from the diesel engine.

Applicable Compliance Method-
Compliance with the emission limitations identified above for the diesel engine shall be determined by using the emission factors from AP-42, 5th Edition (October 1996), Table 3.4-1, "Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines" and the rated capacity of the diesel engine (800 hp/6 MMBTU/hr). The hourly

Gro

PTI

Emissions Unit ID: F001

Issued: To be entered upon final issuance

emission rates are multiplied by 6,000 hours and converted to tons to obtain the yearly emission rates.

AP-42 Table 3.3-1 for combustion emissions from diesel engines

$0.024 \text{ lb NOX/hp-hr} * 800 \text{ hp} = 19.2 \text{ lbs NOx/hr} * 6,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 57.6 \text{ tons NOx/yr}$

$0.006 \text{ lb CO/hp-hr} * 800 \text{ hp} = 4.8 \text{ lbs CO/hr} * 6,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 14.4 \text{ tons CO/yr}$

$0.008 \text{ lb SO}_2\text{/hp-hr} * 800 \text{ hp} * 0.5 = 3.2 \text{ lbs SO}_2\text{/hr} * 6,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 9.6 \text{ tons SO}_2\text{/yr}$

$0.0007 \text{ lb OC/hp-hr} * 800 \text{ hp} = 0.56 \text{ lb OC/hr} * 6,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 1.7 \text{ tons OC/yr}$

$0.0007 \text{ lb PE/hp-hr} * 800 \text{ hp} = 0.56 \text{ lb PE/hr} * 6,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lb} = 1.7 \text{ tons PE/yr}$

- d. Emissions Limitation-
Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method-

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- e. Emissions Limitation-
PE emissions from the large bore stationary engine exhaust shall not exceed 0.062 lb per MMBTU of actual heat input with diesel engine rated at 6 MMBTU/hr.

Applicable Compliance Method-

Compliance with the emissions limitation for the diesel engine identified above shall be determined by using the emission factor for particulate from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines." This emission factor is 0.31 lb particulate/MMBtu (fuel input) for diesel fuel. (Note: this emission factor is equivalent to the emission factor of 0.0022 lb PM/hp-hr.)

F. Miscellaneous Requirements

- Pursuant to OAC rule 3745-31-03(A)(1)(p)(i), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria are met:

Groveport Composting Facility

PTI Application 01-00527

Issue**Facility ID: 0125042428**Emissions Unit ID: **F001**

- a. the portable emissions unit is equipped with the best available technology for such portable emissions unit;
 - b. the portable emissions unit is operating pursuant to a currently effective permit to operate (PTO);
 - c. the applicant has provided proper notice of intent to relocate the portable emissions unit to the CDO having jurisdiction over the new site within a minimum of thirty days prior to the scheduled relocation; and
 - d. in the CDO judgement, the proposed site is acceptable under the rule 3745-15-07 of the Administrative Code.
2. In the alternative, pursuant to OAC rule 3745-31-03(A)(1)(p)(ii), the permittee of a portable or mobile emissions unit may relocate within the State of Ohio without first obtaining a PTI providing the following criteria of OAC rule 3745-31-05(F) are met:
- a. the portable emissions unit permittee possesses an Ohio EPA PTI, PTO or registration status;
 - b. the portable emissions unit is equipped with best available technology;
 - c. the portable emission unit owner has identified the proposed site to Ohio EPA;
 - d. Ohio EPA has determined that the portable emissions unit, at the proposed site, will have an acceptable environmental impact;
 - e. a public notice, consistent with Chapter 3745-47 of the Administrative Code, is published in the county where the proposed site is located;
 - f. the owner of the proposed site has provided the portable emissions unit owner with approval or equivalent declaration that it is acceptable to the site owner to move the portable emissions unit to the proposed site; and
 - g. the portable emissions unit owner has provided the Ohio EPA with fifteen days written notice of the relocation.
3. Any site approvals issued by the Ohio EPA, pursuant to 3. above, shall be valid for no longer than three years and are subject to renewal.

In order for CDO and the appropriate field office having jurisdiction over the new site to determine compliance with all of the above criteria, the owner or operator of the portable or mobile emissions unit must file a "Notice of Intent to Relocate", within the specified time frame (30 or 15 days) prior to the relocation of the emissions unit with CDO having jurisdiction over the new site. Upon

Grov

PTI

Emissions Unit ID: **F001**

Issued: To be entered upon final issuance

receipt of the notice, CDO having jurisdiction over the new site, will evaluate the request in accordance with the above criteria.

Failure to submit said notification and to receive Ohio EPA approval prior to relocation of the emissions unit may result in fines and civil penalties.

4. Terms in section A, B, C, D, and E of this permit are federally enforceable.

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> |
|---|--|
| F002 - MCB soil screen | OAC rule 3745-31-05(A)(3) OAC rule 3745-17-11 (B)(5)(b) OAC rule 3745-17-07 (A)(1) OAC rule 3745-17-07(B) OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for NOX emissions) |
| w/135 hp diesel engine (1 MMBTU/hr) | OAC rule 3745-31-05(A)(3) |

**Grov
PTI**

Emissions Unit ID: **F002**

Issued: To be entered upon final issuance

| <u>Applicable Emissions Limitations/Control Measures</u> | |
|--|---|
| Particulate emissions (PE) shall not exceed 3.2 lbs/hr and 3.2 tons/yr. | and 3745-31-05(D). PE from exhaust shall not exceed 0.31 lb per MMBTU of actual heat input. |
| Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.b through A.2.d. | Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average. | NOx emissions shall not exceed 4.1 tons/rolling, 12-month period. |
| Not applicable in non-Appendix A area | CO emissions shall not exceed 0.9 ton/rolling, 12-month period. |
| NOx emissions shall not exceed 4.1 lbs/hr. | SO2 emissions shall not exceed 0.3 ton/rolling, 12-month period. |
| CO emissions shall not exceed 0.9 lb/hr. | OC emissions shall not exceed 0.3 ton/rolling, 12-month period. |
| SO2 emissions shall not exceed 0.3 lb/hr. | PE shall not exceed 0.3 ton/rolling, 12-month period. |
| OC emissions shall not exceed 0.3 lb/hr. | |
| PE shall not exceed 0.3 lb/hr. | |
| See section A.2.e, B.1, and B.2 below. | |
| Compliance with this rule also includes compliance with OAC rules 3745-17-11(B)(5)(b), 3745-17-07(A), 3745-18-06(G), | |

Issued: To be entered upon final issuance

2. Additional Terms and Conditions

2.a The material handling operation that is covered by this permit and subject to the above-mentioned requirements are listed below:

MCB soil screen

2.b The permittee shall employ best available control measures for the above-identified material handling operation 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 perform the following control measure to ensure compliance:

| <u>material handling operation</u> | <u>control measure</u> |
|------------------------------------|------------------------|
| MCB soil screen | moisture, inherent |

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

2.c For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measure 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 rules 3745-17-08 and 3745-31-05.

2.e The hourly combustion emissions of NOx, SO2, CO, OC and PE reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

B. Operational Restrictions

1. The maximum annual operating hours shall not exceed 2,000 hours per rolling, twelve month period.

To ensure enforceability during the first 12 calendar months of operation, following the issuance of

this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Months(s)</u> | <u>Maximum Allowable Cumulative Operating Hours</u> |
|------------------|---|
| 1 | 150 |
| 1-2 | 300 |
| 1-3 | 450 |
| 1-4 | 600 |
| 1-5 | 750 |
| 1-6 | 900 |
| 1-7 | 1150 |
| 1-8 | 1300 |
| 1-9 | 1450 |
| 1-10 | 1600 |
| 1-11 | 1750 |
| 1-12 | 2000 |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

- 2. The engines shall be operated with diesel fuel with a sulfur content less than 0.5% by weight.

C. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections to determine if visible particulate emissions are being emitted from the operations listed below in accordance with the following minimum frequencies:

| <u>operation</u> | <u>minimum inspection frequency</u> |
|------------------|-------------------------------------|
| MCB soil screen | Daily, when operating |

- 2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
- 3. The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the "no visible emissions" requirement..
- 4. The permittee shall note the following in an operations log for each operation (soil grinder) at the

Issued: To be entered upon final issuance

minimum inspection frequency specified above whenever the emissions unit is in operation:

- a. the date and time of each observation;
 - b. the presence or absence of any visible emissions;
 - c. whether it was determined by the permittee that it was necessary to implement the control measures;
 - d. the dates and times the control measures were implemented; and
 - e. the name of the person reporting each observation.
5. The permittee shall maintain a record of the sulfur content of each shipment of diesel fuel received for burning in this emissions unit.
6. The permittee shall maintain monthly records of the following information:
- a. the operating hours for each month; and
 - b. the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours during each calendar month.

7. The operations log shall be maintained on site.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:
 - a. each day when visible emissions were observed, and at which location;
 - b. each day during which an inspection was not performed by the required frequency; and
 - c. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

Gro

PTI

Emissions Unit ID: F002

Issued: To be entered upon final issuance

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.
4. The permittee shall submit a deviation report for each day when a fuel other than 0.5% sulfur diesel fuel was burned in this emissions unit. This report shall be submitted within 30 days after the deviation occurred

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations-
PE shall not exceed 3.2 lbs/hr and 3.2 tons/yr from the MCB soil screen.

Applicable Compliance Method-
Compliance shall be based on compost handling at 40,000 tons/yr * 0.00008 lb/ton = 3.2 tons PM/yr * 2,000 lb/ton * 1yr/2,000 hr = 3.2 lbs PM/hr
 - b. Emission Limitation-
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method-
If required, compliance shall be determined through visible emission observations performed in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996.
 - c. Emission Limitation-
Combustion emissions shall not exceed the following: NOx emissions shall not exceed 4.1 lbs/hr per hour and 4.1 tons/yr; CO emissions shall not exceed 0.9 lb/hr and 0.9 ton/yr; SOx emissions shall not exceed 0.28 lb/hr and 0.28 ton/yr; OC emissions shall not exceed 0.33 lb/hr and 0.33 ton/yr and PE shall not exceed 0.3 lb/hr and 0.3 ton/yr.

Applicable Compliance Method-
Compliance with the emission limitations identified above for the diesel engines shall be determined by using the emission factors from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines" and the

Groveport Composting Facility

PTI Application 01-00527

Issue**Facility ID: 0125042428**Emissions Unit ID: **F003**

rated capacity of the diesel engines (135). The hourly emission rates are multiplied by 2,000 hours and converted to tons to obtain the annual emissions.

AP-42 Table 3.3-1

$0.031 \text{ lb NOx/hp-hr} * 135 \text{ hp} = 4.1 \text{ lbs NOx/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 4.1 \text{ tons NOx/yr}$

$0.00668 \text{ lb CO/hp-hr} * 135 \text{ hp} = 0.9 \text{ lb CO/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 0.9 \text{ ton CO/yr}$

$0.00205 \text{ lb SOx/hp-hr} * 135 \text{ hp} = 0.3 \text{ lb SOx/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 0.3 \text{ ton SOx/yr}$

$0.00247 \text{ lb OC/hp-hr} * 135 \text{ hp} = 0.3 \text{ lb OC/hr} * 2,000 \text{ hrs/yr} * 1 \text{ ton}/2000 \text{ lbs} = 0.3 \text{ ton OC/yr}$

$0.0022 \text{ lb PE/hp-hr} * 135 \text{ hp} = 0.3 \text{ lb PE/hr} * 2,000 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.3 \text{ ton PE/yr}$

- Dd. Emission Limitation-
Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method-

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- e. Emission Limitation-
PE emissions from a small bore diesel engine exhaust stack shall not exceed 0.310 lb per MMBtu of actual heat input with diesel engine rated at 1 MMBTU/hr.

Applicable Compliance Method-

Compliance with the emissions limitation for the diesel engine identified above shall be determined by using the emission factor for particulates from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines." This emission factor is 0.31 lb particulate/MMBtu (fuel input) for diesel fuel. (Note: this emission factor is equivalent to the emission factor of 0.0022 lb PM/hp-hr.)

F. Miscellaneous Requirements

- Terms in section A, B, C, D and E of this permit are federally enforceable.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. Applicable Emissions Limitations and/or Control Requirements**

**Grov
PTI**

Emissions Unit ID: **F003**

Issued: To be entered upon final issuance

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.

| Operations, Property, and/or Equipment | <u>Applicable Rules/Requirements</u> |
|---|--------------------------------------|
| F003 - mulch color machine | OAC rule 3745-31-05(A)(3) |
| | OAC rule 3745-17-11 (B)(5)(b) |
| | OAC rule 3745-17-07(B) |
| | OAC rule 3745-17-07 (A)(1) |
| | OAC rule 3745-17-08 |
| w/45 hp diesel engine (0.5 MMBTU/hr) | OAC rule 3745-31-05(A)(3) |

Groveport Composting Facility

PTI Application 01-00527

Issue**Facility ID: 0125042428****Emissions Unit ID: F003**

| <u>Applicable Emissions Limitations/Control Measures</u> | |
|--|---|
| Particulate emissions (PE) shall not exceed 0.2 lb/hr and 0.8 ton/yr. | 3745-17-07(A), and 3745-18-06(G). |
| Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See sections A.2.b through A.2.d. | PE from a small engine exhaust stack shall not exceed 0.31 lb per MMBTU of actual heat input. |
| Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average. | Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule. |
| Not applicable in non-Appendix A area. | |
| NOx emissions shall not exceed 1.4 lbs/hr and 6.1 tons/yr. | |
| CO emissions shall not exceed 0.3 lb/hr and 1.2 tons/yr. | |
| SO2 emissions shall not exceed 0.1 lb/hr and 0.4 ton/yr. | |
| OC emissions shall not exceed 0.2 lb/hr and 0.8 ton/yr. | |
| PE shall not exceed 0.1 lb/hr and 0.4 ton/yr. | |
| See section A.2.e, B.1, and B.2 below. | |
| Compliance with this rule also includes compliance with OAC rules 3745-17-11(B)(5)(b), | |

Grov
PTI

Emissions Unit ID: **F003**

Issued: To be entered upon final issuance

2. Additional Terms and Conditions

- 2.a** The material handling operation that is covered by this permit and subject to the above-mentioned requirements are listed below:

Mulch color machine

- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation 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 perform the following control measure to ensure compliance:

material handling operation

control measure

Mulch color machine

Moisture, inherent

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

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measure 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 rules 3745-17-08 and 3745-31-05.
- 2.e** The hourly combustion emissions of NO_x, SO₂, CO, OC and PE reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

B. Operational Restrictions

1. The engines shall be operated with diesel fuel with a sulfur content less than 0.5% by weight.

C. Monitoring and/or Recordkeeping Requirements

Grov**PTI /**Emissions Unit ID: **F003****Issued: To be entered upon final issuance**

1. Except as otherwise provided in this section, the permittee shall perform inspections to determine if visible particulate emissions are being emitted from the operations listed below in accordance with the following minimum frequencies:

| <u>operation</u> | <u>minimum inspection frequency</u> |
|---------------------|-------------------------------------|
| Mulch color machine | Daily, when operating |

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee may, upon receipt of written approval from the Ohio EPA, Central District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the "no visible emissions" requirement..

4. The permittee shall note the following in an operations log for each operation (soil grinder) at the minimum inspection frequency specified above whenever the emissions unit is in operation:

- a. the date and time of each observation;
- b. the presence or absence of any visible emissions;
- c. whether it was determined by the permittee that it was necessary to implement the control measures;
- d. the dates and times the control measures were implemented; and
- e. the name of the person reporting each observation.

5. The permittee shall maintain a record of the sulfur content of each shipment of diesel fuel received for burning in this emissions unit.

6. The operations log shall be maintained on site.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any of the following occurrences:

Groveport Composting Facility

PTI # 01 00527

Issue**Facility ID: 0125042428**Emissions Unit ID: **F003**

- a. each day when visible emissions were observed, and at which location;
 - b. each day during which an inspection was not performed by the required frequency; and
 - c. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit..
 3. The permittee shall submit a deviation report for each day when a fuel other than 0.5% sulfur diesel fuel was burned in this emissions unit. This report shall be submitted within 30 days after the deviation occurred

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations-
PE shall not exceed 0.2 lb/hr and 0.8 tons/yr.

Applicable Compliance Method-
Compliance shall be based on mulch handling at 7.5 tons/hr * 0.024 lb PM/ton(Ohio RACM 2.17-1) = 0.2 lbs PM/hr * 8,760 hrs /yr * 1 ton/2,000lbs = 0.8 ton PM/yr
 - b. Emissions Limitation-
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method-
If required, compliance shall be determined through visible emission observations performed in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996.
 - c. Emissions Limitation-
NOx emissions shall not exceed 1.4lbs/hr and 6.1 tons/yr; CO emissions shall not exceed 0.3 lb/hr and 1.3 ton/yr; SO2 emissions shall not exceed 0.1 lb/hr and 0.4 ton/yr; OC emissions shall not exceed 0.2 lbs/hr and 0.88 ton/yr; and PE shall not exceed 0.1 lb/hr and 0.4 ton/yr in combustion gases from the diesel engine.

Gro

PTI

Emissions Unit ID: F003

Issued: To be entered upon final issuance**Applicable Compliance Method-**

Compliance with the emission limitations identified above for the diesel engine shall be determined by using the emission factors from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines" and the rated capacity of the diesel engine (45 hp). The hourly emission rates are multiplied by 8,760 hours and converted to tons to obtain the yearly emission rates.

AP-42 Table 3.3-1 for combustion emissions from diesel engines

$0.031 \text{ lb NOx/hp-hr} * 45 \text{ hp} = 1.4 \text{ lbs NOx/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 6.1 \text{ tons NOx/yr}$

$0.00668 \text{ lb CO/hp-hr} * 45 \text{ hp} = 0.3 \text{ lb CO/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 1.2 \text{ ton CO/yr}$

$0.00205 \text{ lb SOx/hp-hr} * 45 \text{ hp} = 0.1 \text{ lb SOx/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.4 \text{ ton SOx/yr}$

$0.00247 \text{ lb OC/hp-hr} * 45 \text{ hp} = 0.2 \text{ lb OC/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.8 \text{ ton OC/yr}$

$0.0022 \text{ lb PE/hp-hr} * 45 \text{ hp} = 0.1 \text{ lb PE/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lb} = 0.4 \text{ ton PE/yr}$

d. **Emission Limitation-**

Visible PE from the diesel engine exhaust stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method-

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Test Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e. **Emission Limitation-**

PE emissions from the diesel engine exhaust stack shall not exceed 0.31 lb per MMBtu of actual heat input with diesel engine rated at 0.5 MMBTU/hr.

Applicable Compliance Method-

Compliance with the emissions limitation for the diesel engine identified above shall be determined by using the emission factor for particulates from AP-42, 5th Edition (October 1996), Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines." This emission factor is 0.31 lb particulate/MMBtu (fuel input) for diesel fuel. (Note: this emission factor is equivalent to the emission factor of 0.0022 lb PM/hp-hr.)

F. Miscellaneous Requirements

None