



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

10/2/2015

Mr. Jerry Bennett
Kurtz Bros - Groveport Composting Facility
6279 Houchard Road
Dublin, OH 43016

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0125042428
Permit Number: P0119016
Permit Type: Renewal
County: Franklin

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-CDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Kurtz Bros - Groveport Composting Facility**

Facility ID:	0125042428
Permit Number:	P0119016
Permit Type:	Renewal
Issued:	10/2/2015
Effective:	10/2/2015
Expiration:	7/17/2025



Division of Air Pollution Control
Permit-to-Install and Operate
for
Kurtz Bros - Groveport Composting Facility

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Final Permit-to-Install and Operate
Kurtz Bros - Groveport Composting Facility
Permit Number: P0119016
Facility ID: 0125042428
Effective Date: 10/2/2015

Authorization

Facility ID: 0125042428
Application Number(s): A0053603, A0053614
Permit Number: P0119016
Permit Description: PTIO Renewal for emission units F003 (mulch color machine w/45 hp diesel engine), F005 (storage piles), and F006 (paved and unpaved roadways and pads)
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 10/2/2015
Effective Date: 10/2/2015
Expiration Date: 7/17/2025
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Kurtz Bros - Groveport Composting Facility
2850 Rohr Rd
Groveport, OH 43125

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0119016

Permit Description: PTIO Renewal for emission units F003 (mulch color machine w/45 hp diesel engine), F005 (storage piles), and F006 (paved and unpaved roadways and pads)

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	F003
Company Equipment ID:	Keestrack
Superseded Permit Number:	01-08537
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F005
Company Equipment ID:	Storage Piles
Superseded Permit Number:	01-08537
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F006
Company Equipment ID:	Roadways
Superseded Permit Number:	01-08537
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
Kurtz Bros - Groveport Composting Facility
Permit Number: P0119016
Facility ID: 0125042428
Effective Date: 10/2/2015

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



Final Permit-to-Install and Operate
Kurtz Bros - Groveport Composting Facility
Permit Number: P0119016
Facility ID: 0125042428
Effective Date: 10/2/2015

B. Facility-Wide Terms and Conditions



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



Final Permit-to-Install and Operate
Kurtz Bros - Groveport Composting Facility
Permit Number: P0119016
Facility ID: 0125042428
Effective Date: 10/2/2015

C. Emissions Unit Terms and Conditions



1. F003, Keestrack

Operations, Property and/or Equipment Description:

mulch color machine w/45 hp diesel engine

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-08537, as issued 10/1/2002)	Emissions shall not exceed: <u>Mulch Handling:</u> 0.001 lb PM-10/hr and 0.005 TPY PM-10 <u>45hp diesel engine:</u> 1.4 lbs NO _x /hr and 6.1 tons NO _x /yr 0.3 lb CO/hr and 1.3 tons CO/yr 0.09 lb SO _x /hr and 0.4 ton SO _x /yr 0.11 lb VOC/hr and 0.5 ton VOC/yr 0.1 lb PM-10/hr and 0.4 ton PM-10/yr



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions shall not exceed 0.310 lb/MMBTU of actual heat input.

(2) Additional Terms and Conditions

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

Mulch color machine

- 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>
Mulch color machine	moisture, inherent

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

- 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 an inspection, 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.
- d. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- e. The hourly combustion emissions of NO_x, SO_x, CO, VOC, and PM-10 reflect the maximum 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.
- f. Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

<u>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 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 perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(4)above:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

f) Testing Requirements

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

a. Emission Limitation:

Material Handling

0.001 lb PM-10/hr and 0.005 TPY PM-10

Applicable Compliance Method:

Compliance shall be based on the following AP-42 calculation:

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

E = emission factor lbs PM-10/ton

K = particle size multiplier (PM-10) = 0.35

U = mean wind speed = 8.7 mph

M = material moisture content = 22%



$$E = 0.35 * (0.0032) * ((8.7 \text{ mph}/5)^{1.3})/((22/2)^{1.4})$$

$$E = 0.00112 * (2.05/28.7) = 0.00008 \text{ lb PM-10/ton} * 7.5 \text{ tons/hr} = 0.0006 \text{ lb PM-10/hr} * 8,760 \text{ hrs/yr} * \text{ton}/2,000 \text{ lbs} = 0.0026 \text{ TPY PM-10}$$

$$0.0026 \text{ TPY PM-10} * 2 \text{ (to account for loading and unloading)} = 0.005 \text{ TPY PM-10}$$

b. Emission Limitation:

Diesel Engine:

1.4 lbs NO_x/hr and 6.1 TPY NO_x

0.3 lb CO/hr and 1.3 TPY CO

0.09 lb SO_x/hr and 0.4 TPY SO_x

0.11 lb VOC/hr and 0.5 TPY VOC

0.1 lb PM-10/hr and 0.4 TPY PM-10

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, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines" and the rate capacity of the diesel engine (45hp). 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

$$0.031 \text{ lb NO}_x/\text{hp-hr} * 45 \text{ hp} = 1.4 \text{ lbs NO}_x/\text{hr} * 8,760 \text{ hr/yr} * \text{ton}/2,000 \text{ lbs} = 6.1 \text{ TPY NO}_x$$

$$0.00668 \text{ lb CO}/\text{hp-hr} * 45 \text{ hp} = 0.3 \text{ lb CO}/\text{hr} * 8,760 \text{ hr/yr} * \text{ton}/2,000 \text{ lbs} = 1.3 \text{ TPY CO}$$

$$0.00205 \text{ lb SO}_x/\text{hp-hr} * 45 \text{ hp} = 0.09 \text{ lb SO}_x/\text{hr} * 8,760 \text{ hr/yr} * \text{ton}/2,000 \text{ lbs} = 0.4 \text{ TPY SO}_x$$

$$0.00247 \text{ lb VOC}/\text{hp-hr} * 45 \text{ hp} = 0.11 \text{ lb VOC}/\text{hr} * 8,760 \text{ hr/yr} * \text{ton}/2,000 \text{ lbs} = 0.5 \text{ TPY VOC}$$

$$0.0022 \text{ lb PM-10}/\text{hp-hr} * 45 \text{ hp} = 0.1 \text{ lb PM-10}/\text{hr} * 8,760 \text{ hr/yr} * \text{ton}/2,000 \text{ lbs} = 0.4 \text{ TPY PM-10}$$



c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitation:

Particulate emissions from the diesel engine exhaust stack shall not exceed 0.310 lb/MMBTU of actual heat input.

Applicable Compliance Method:

Compliance with the emissions limitation for the color mulch machines diesel engine shall be determined by using the emission factor for particulates from AP-42, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines."

g) Miscellaneous Requirements

(1) None.

2. F005, Storage Piles

Operations, Property and/or Equipment Description:

storage piles with material handling by load-in and load-out and wind erosion

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-08537, as issued 10/1/2002)	Emissions Shall not exceed: 0.03 lbs PM-10/hr and 0.1 tons PM-10/rolling, 12 month period There shall be no visible particulate emissions except for a period of time not to exceed one minute during any 60 minute observation period from storage piles.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust



suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- b. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- c. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- e. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

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

d) Monitoring and/or Recordkeeping Requirements

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

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	daily

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

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
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all	daily
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- (3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
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all	daily
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- (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 shall maintain records of the following information:

- 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;
- the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- the dates the control measures were implemented; and
- 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).

- (7) The information required in d)(6)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.
- (9) The operations log shall be maintained on site.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

Annual operating hours for material handling shall not exceed 3,000 hours, based upon a rolling, 12-month summation of the operating hours.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

f) Testing Requirements

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



a. Emission Limitation:

0.03 lbs PM-10/hr and 0.1 tons PM-10/rolling, 12 month period

Applicable Compliance Method:

Compliance shall be determined by summing the calculated emission for material handling of mulch and with those emissions resulting from stockpiling of mulch and soils using the following AP-42 calculations:

i. Mulch Handling:

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

E = emission factor lbs PM-10/ton

K = particle size multiplier (PM-10) = 0.35

U = mean wind speed = 8.7 mph

M = material moisture content = 22%

$$E = 0.35 * (0.0032) * ((8.7 \text{ mph}/5)^{1.3})/((22/2)^{1.4})$$

$$E = 0.00112 * (2.05/28.7) = 0.00008 \text{ lbs PM-10/ton} * 15 \text{ tons/hr} = 0.0012 \text{ lbs PM-10/hr} * 8,760 \text{ hrs/yr} * \text{ton}/2,000 \text{ lbs} = 0.005 \text{ TPY PM-10}$$

Multiply by 3 to account for unloading, loading, and one transfer pt.

$$0.005 \text{ TPY PM-10} * 3 = 0.015 \text{ TPY PM-10}$$

ii. Yard Waste Handling/Storage Piles

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

E = emission factor lbs PM-10/ton

K = particle size multiplier (PM-10) = 0.35

U = mean wind speed = 8.7 mph

M = material moisture content = 14%

$$E = 0.35 * (0.0032) * ((8.7 \text{ mph}/5)^{1.3})/((14/2)^{1.4})$$

$$E = 0.00112 * (2.05/15.25) = 0.0002 \text{ lbs PM-10/ton} * 30 \text{ tons/hr} = 0.0045 \text{ lbs PM-10/hr} * 8,760 \text{ hrs/yr} * \text{ton}/2,000 \text{ lbs} = 0.02 \text{ TPY PM-10}$$

Multiply by 3 to account for unloading, loading, and one transfer pt.

$$0.02 \text{ TPY PM-10} * 3 = 0.06 \text{ TPY PM-10}$$

iii. Compost Handling/Storage Piles

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

E = emission factor lbs PM-10/ton

K = particle size multiplier (PM-10) = 0.35

U = mean wind speed = 8.7 mph

M = material moisture content = 40%

$$E = 0.35 * (0.0032) * ((8.7 \text{ mph}/5)^{1.3})/((40/2)^{1.4})$$

$$E = 0.00112 * (2.05/66.29) = 0.001 \text{ lbs PM-10/ton} * 30 \text{ tons/hr} = 0.0045 \text{ lbs PM-10/hr} * 8,760 \text{ hrs/yr} * \text{ton}/2,000 \text{ lbs} = 0.005 \text{ TPY PM-10}$$

Multiply by 3 to account for unloading, loading, and one transfer pt.

$$0.005 \text{ TPY PM-10} * 3 = 0.015 \text{ TPY PM-10}$$

iv. Soil Handling/Storage Piles

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

E = emission factor lbs PM-10/ton

K = particle size multiplier (PM-10) = 0.35

U = mean wind speed = 8.7 mph

M = material moisture content = 22%

$$E = 0.35 * (0.0032) * ((8.7 \text{ mph}/5)^{1.3})/((22/2)^{1.4})$$

$$E = 0.00112 * (2.05/28.7) = 0.0001 \text{ lbs PM-10/ton} * 30 \text{ tons/hr} = 0.0024 \text{ lbs PM-10/hr} * 8,760 \text{ hrs/yr} * \text{ton}/2,000 \text{ lbs} = 0.01 \text{ TPY PM-10}$$

Multiply by 3 to account for unloading, loading, and one transfer pt.

$$0.01 \text{ TPY PM-10} * 3 = 0.03 \text{ TPY PM-10}$$

$$\text{Total PM-10} = 0.015 + 0.06 + 0.015 + 0.01 = 0.1 \text{ TPY PM-10}$$

b. Emission Limitation:

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



Final Permit-to-Install and Operate
Kurtz Bros - Groveport Composting Facility
Permit Number: P0119016
Facility ID: 0125042428
Effective Date: 10/2/2015

Applicable Compliance Method:

Compliance with the emission limitation for storage piles 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.")

- g) Miscellaneous Requirements
 - (1) None.

3. F006, Roadways

Operations, Property and/or Equipment Description:

Paved roadways and working pads Unpaved roadways and working pads

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) **Applicable Emissions Limitations and/or Control Requirements**

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 01-08537, as issued 10/1/2002)	Emissions shall not exceed: <u>Paved:</u> 1.1 TPY PM-10 There shall be no visible particulate emissions except for a period of one minute during any 60 minute observation period from a paved roadway. <u>Unpaved:</u> 2.2 TPY PM-10 There shall be no visible particulate emissions except for a period of three minutes during any 60 minute observation period from an unpaved roadway.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- d. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- e. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

<u>roadways and parking areas</u>	<u>minimum inspection frequency</u>
all paved roads and parking areas	daily
all unpaved roads and parking areas	daily

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

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

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

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

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

f) Testing Requirements

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

a. Emissions Limitation:

1.1 TPY PM-10 from paved roadways

Applicable Compliance Method:

Compliance shall be determined by the following calculations based on AP-42 and application submitted by Kurtz Brother's, Inc.:

Paved entrance roadway and staging areas.

$$E = k(sL)^{0.91} * (W)^{1.02}$$

K = particle size multiplier = 0.0022 lb/VMT (PM-10 Table 13.2.1-1 of AP-42)

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

W = average vehicle weight = 7.8 tons

P = number of hours a year with at least 0.01 inch of rain

N = number of hours in a year

$$E = 0.0022(32)^{0.91}(7.8)^{1.02} = 0.73 \text{ lb PM-10/VMT}$$

$$0.73 \text{ lb PM-10/VMT} * 5,224 \text{ VMT/yr} * \text{ton}/2,000 \text{ lbs} = 1.9 \text{ TPY PM-10}$$

With Precipitation Correction:

$$E_{\text{ext}} = E * (1 - (1.2P/N)) = 1.9 * (1 - (1.2 * 3120/8760)) = 1.1 \text{ TPY PM-10}$$

b. Emission Limitation:

2.2 TPY PM-10 from unpaved roadways

Applicable Compliance Method:

Compliance shall be determined by the following calculations:

Unpaved access roads, compost and soil processing areas

$$E = K((s/12)^a) * (W/3)^b$$

K = particle size multiplier = 1.5 (PM-10 Table 13.2.2-2 AP-42)

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

W = average vehicle weight = 7.8 tons

a = 0.9

b = 0.45



P = number of days a year with at least 0.01 inch of rain

$$E = 1.5(6.4/12)^{0.9}(7.8/3)^{0.45} = 1.31 \text{ lbs PM-10/VMT}$$

$$1.31 \text{ lbs PM-10/VMT} * 5,224 \text{ VMT/yr} * \text{ton}/2,000 \text{ lbs} = 3.42 \text{ TPY PM-10}$$

With Precipitation Correction:

$$E_{\text{ext}} = E * [(365-P)/365] = 3.42 * [(365-130)/365] = 2.2 \text{ TPY PM-10}$$

c. Emission Limitation:

There shall be no visible emissions except for a period not to exceed one minute during any 60 minute observation period from paved roadways and parking areas.

Applicable Compliance Method:

Compliance with the emission limitation for paved roadways an 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."

d. Emission Limitation:

There shall be no visible emissions except for a period not to exceed three minutes during any 60 minute observation period from unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance with the emission limitation for unpaved roadways an 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."

g) Miscellaneous Requirements

- (1) None.