



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

5/16/2012

Rodney Pierce
Heritage Environmental Services, LLC (Rotochopper RG-1)
7901 West Morris Street
Indianapolis, IN 46231

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1431004445
Permit Number: P0109851
Permit Type: Initial Installation
County: Hamilton

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final 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. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: SWOAQA



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for**

Heritage Environmental Services, LLC (Rotochopper RG-1)

Facility ID:	1431004445
Permit Number:	P0109851
Permit Type:	Initial Installation
Issued:	5/16/2012
Effective:	5/16/2012
Expiration:	5/16/2022



Division of Air Pollution Control
Permit-to-Install and Operate
for
Heritage Environmental Services, LLC (Rotochopper RG-1)

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Authorization

Facility ID: 1431004445
Application Number(s): A0044250, A0044267
Permit Number: P0109851
Permit Description: Initial permit for a new portable shingle grinding/material handling operation (P901) installed prior to obtaining a PTIO. Includes associated storage piles (F001).
Permit Type: Initial Installation
Permit Fee: \$2,900.00
Issue Date: 5/16/2012
Effective Date: 5/16/2012
Expiration Date: 5/16/2022
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Heritage Environmental Services, LLC (Rotochopper RG-1)
201 Shepherd Avenue
Lockland, OH 45215

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

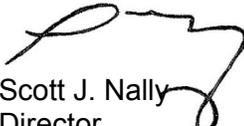
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0109851

Permit Description: Initial permit for a new portable shingle grinding/material handling operation (P901) installed prior to obtaining a PTIO. Includes associated storage piles (F001).

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

Emissions Unit ID:	F001
Company Equipment ID:	Storage Piles
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P901
Company Equipment ID:	Grinding / Material Handling
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 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 Southwest Ohio Air Quality Agency 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 submitting¹ 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 emissions 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.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

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.

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.

C. Emissions Unit Terms and Conditions



1. F001, Storage Piles

Operations, Property and/or Equipment Description:

Storage Piles associated with Rotochopper RG-1 Serial # 10-2442

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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row a: OAC rule 3745-31-05(A)(3), as effective 11/30/2001. Row b: OAC rule 3745-31-05(A)(3)(b), as effective 12/1/2006.

c.	OAC rule 3745-17-07(B)(6) (applicable only if this emission unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	There shall be no visible particulate emissions from the material storage piles except for a period of time not to exceed thirteen minutes during any 60-minute observation period.
d.	OAC rule 3745-17-08(B) (applicable only if this emission unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See b)(2)c. through b)(2)f.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source since the uncontrolled potential to emit for PE and PM10 is less than 10 tons per year.

c. The permittee shall employ reasonably 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.

- d. 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.
 - e. The permittee shall employ reasonably 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.
 - f. 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.
 - g. Compliance with OAC rule 3745-31-05(A)(3), as effective 11/30/2001, shall be demonstrated by the emission limitations, visible emission limitation, and control measures mentioned above.
 - h. The annual emissions limitations for PE and PM10 are based upon the emissions unit's potential to emit. Therefore, no annual records are required to demonstrate compliance with these limitations.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
all	weekly
 - (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:



storage pile identification minimum load-out inspection frequency

all weekly

- (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:

storage pile identification minimum wind erosion inspection frequency

all weekly

- (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:

- 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 form pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(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.

e) Reporting Requirements

- (1) 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. It is

recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (2) 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.

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 Limitations:

Fugitive particulate emissions (PE) shall not exceed 0.22 ton per year (TPY).

Fugitive particulate matter 10 microns and less in diameter (PM10) emissions shall not exceed 0.11 ton per year (TPY).

Applicable Compliance Method:

Compliance with PE and PM10 limitations shall be determined by using the wind erosion calculations found in AP-42, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures" (9/92) and the Load-in/Load-out calculations found in AP-42, Fifth Edition, Volume 1, Chapter 13.2.4. (revised 11/06).

Load-in/Load-out

PE: $(0.000893 \text{ lbs/ton}) \times (132,000 \text{ tons per year}) \times (1 - 0.80 \text{ control efficiency}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2)^* = 0.024 \text{ TPY PE controlled}$

PM10: $(0.000422 \text{ lbs/ton}) \times (132,000 \text{ tons per year}) \times (1 - 0.80 \text{ control efficiency}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2)^* = 0.011 \text{ TPY PM10 controlled}$

*Total doubled to account for both load-in and load-out operations.

Wind Erosion

PE: $(22.67 \text{ lbs PE/day/acre}) \times (0.24 \text{ acres}) \times (365 \text{ days/year}) \times (1 - 0.80 \text{ control efficiency}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.20 \text{ TPY PE controlled}$

PM10: $(0.20 \times 0.5) = 0.10 \text{ TPY PM10 controlled}$

*PM10 is estimated to be half of the quantity of the PE.



Total Load-in/Load-out and Wind Erosion

PE: $0.024 \text{ TPY} + 0.20 \text{ TPY} = 0.22 \text{ TPY}$ controlled

PM10: $0.011 \text{ TPY} + 0.10 \text{ TPY} = 0.11 \text{ TPY}$ controlled

b. Emissions Limitations:

The uncontrolled potential to emit for PE and PM10 is less than 10 tons per year.

Applicable Compliance Method:

Compliance with PE and PM10 limitations shall be determined by using the wind erosion calculations found in AP-42, "Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures" (9/92) and the Load-in/Load-out calculations found in AP-42, Fifth Edition, Volume 1, Chapter 13.2.4. (revised 11/06).

Load-in/Load-out

PE: $(0.000893 \text{ lbs/ton}) \times (132,000 \text{ tons per year}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2) = 0.012 \text{ TPY}$ PE uncontrolled

PM10: $(0.000422 \text{ lbs/ton}) \times (132,000 \text{ tons per year}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (2) = 0.06 \text{ TPY}$ PM10 uncontrolled

*Total doubled to account for both load-in and load-out operations.

Wind Erosion

PE: $(22.67 \text{ lbs PE/day/acre}) \times (0.24 \text{ acres}) \times (365 \text{ days/year}) \times (1 \text{ ton}/2000 \text{ lbs}) = 0.99 \text{ TPY}$ PE uncontrolled

PM10: $(0.99 \times 0.5) = 0.50 \text{ TPY}$ PM10 uncontrolled

*PM10 is estimated to be half of the quantity of the PE.

c. Emission Limitation:

There shall be no visible PE except for a period of time not to exceed thirteen minutes in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE 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").

- g) Miscellaneous Requirements
 - (1) None.



2. P901, Grinding / Material Handling

Operations, Property and/or Equipment Description:

Grinding / Material Handling - Rotochopper RG-1 Serial # 10-2442

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. b)(1)b. and c)(4).

(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.

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. It lists three rows (a, b, c) detailing regulatory references and emission limits for nitrogen oxides, carbon monoxide, VOC, and particulate matter.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>TPY.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.00205 lb/hp-hr and 1.6 TPY.</p> <p>Fugitive emissions from product processing:</p> <p>Fugitive particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM₁₀) shall not exceed 3.5 pounds per hour and 4.6 tons per year (TPY).</p> <p>See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-31-05(A)(3)(b), 3745-17-07(A)(1), 3745-17-07(B), 3745-17-08(A)(2), 3745-17-08(B), and 3745-17-11(B)(5)(a).</p>
d.	OAC rule 3745-31-05(C), as effective 12/1/2006 Voluntary Restriction to Avoid BAT	See b)(2)b., b)(2)d., c)(3), and c)(4).
e.	OAC rule 3745-31-05(A)(3)(b), as effective 12/1/2006	See b)(2)c.
f.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the exhaust stack serving this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
g.	OAC rule 3745-17-07(B) (applicable only if this emission unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.
h.	OAC rule 3745-17-08(A)(2)	See b)(2)d., b)(2)e., b)(2)f., b)(2)g., and b)(2)h.
i.	OAC rule 3745-17-08(B) (applicable only if this emission unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	See b)(2)d., b)(2)e., b)(2)f., b)(2)g., and b)(2)h.
j.	OAC rule 3745-17-11(B)(5)(a)	Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to install and operate P0109851 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. for carbon monoxide (CO) emissions: the annual operating hours restriction as specified in c)(4); and
 - ii. for fugitive particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) from product processing: the annual production restriction, as specified in c)(3), and the material handling operations, as specified in b)(2)d., that this emissions unit shall be controlled by a wet spray system at all times the emissions unit is in operation.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions, stack particulate emissions (PE) and particulate matter 10 microns and less in diameter (PM10) emissions from diesel fuel burning, and sulfur dioxide (SO2) emissions from this air contaminant source since the uncontrolled potential to emit for VOC, stack PE/PM10, and SO2 is each less than 10 tons/year.

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

<u>Material handling operation(s)</u>	<u>control measure(s)</u>
All grinding activity	Wet spray system
Discharge from the first conveyor following grinding	Wet spray system

- e. The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with material handling for the purpose of ensuring compliance with the above-mentioned applicable requirements and shall minimize the free fall distance of the processed material.
- f. The permittee shall employ reasonably available control measures for the material handling operations listed above, 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 the use of a wet spray system, in order to maintain compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- g. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) in b)(2)d. shall be implemented, if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- h. Except at times when sufficient rainfall exists to eliminate visible emissions of fugitive dust, the wet spray system shall be in operation at all times when this emission unit is operating in order to minimize or eliminate visible emissions of fugitive dust.
- i. The permittee shall post a sign prohibiting the acceptance of any asbestos containing material (ACM). The permittee shall also post and maintain a sign at the facility entrance identifying, at the minimum, the name of the permittee, the hours of operation and the authorized wastes.
- j. The permittee shall train all staff at least once each calendar year. The training shall include identification of waste, safety and proper management and handling of all wastes and materials on-site.
- k. Incidental wastes processed in this emission unit shall not exceed a total of five percent (5%) by weight of the overall load.

- l. The hourly emission limitations for NO_x, CO, VOC, stack PE/PM₁₀, SO₂, and fugitive PE/PM₁₀ outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.
- m. Compliance with ORC 3704.03(T) shall be demonstrated by the emissions limitations and the operating hours restriction.
- n. Compliance with OAC rule 3745-31-05(A)(3), as effective 11/30/2001, shall be demonstrated by the emissions limitations, production restriction, operating hours restriction, and material handling operation controls.

c) **Operational Restrictions**

- (1) The facility shall not accept for processing any regulated asbestos-containing material as defined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos, 40 CFR Part 61, Subpart M, Section 141 and OAC rule 3745-20, or any subsequent revisions to either rule.
- (2) Upon identification of any asbestos containing material, the permittee shall immediately transport the asbestos containing material to a landfill permitted to accept asbestos containing material.
- (3) The maximum annual tons of material processed shall not exceed 132,000 tons based upon a rolling, 12-month summation of the materials processed.
- (4) The maximum annual operating hours for this emissions unit shall not exceed 2,640 hours.
- (5) The permittee shall not accept:
 - a. Material from any source other than residential and/or former residential sources unless the material has been sampled and tested for asbestos;
 - b. Any rolled or commercial roofing;
 - c. Any asphalt siding shingle wastes;
 - d. Any hazardous or special waste; or
 - e. Other construction and demolition waste other than that which may be incidentally associated with post-consumer asphalt roofing shingle waste from residential sources (e.g., tarpaper, wood, metal, nails, etc.).

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The total operating hours;
 - b. The total tons of materials processed;
 - c. The updated rolling, 12-month summation of the tons of materials processed; and
 - d. The CO, VOC, stack PE/PM10, fugitive PE/PM10, and SO2 emissions.

At the end of each calendar year, the permittee shall sum the monthly records and maintain a record of the annual operating hours and emissions for each calendar year.

- (2) Prior to processing any materials, the permittee shall inspect all material being accepted in order to determine whether or not asbestos containing material is present. If asbestos containing material is determined to be present, the permittee shall record the following:
- a. Date of delivery of the asbestos containing material;
 - b. Physical description of the asbestos containing material;
 - c. The amount of asbestos containing material; and
 - d. The name and location of the landfill used to dispose of the asbestos containing material.

All personnel inspecting loads of incoming material shall be trained in the identification of asbestos containing material.

- (3) The permittee shall develop and implement an asbestos containing material sampling plan and shall sample at a frequency adequate to safeguard against the accidental processing of asbestos containing material. This plan shall be submitted for approval to the Southwest Ohio Air Quality Agency within 60 days of final issuance of this PTIO. Based on a history of sampling, this program may be modified at the request of the Southwest Ohio Air Quality Agency or the company and can only be implemented after the Southwest Ohio Air Quality Agency's approval.
- (4) Loads that are suspected of containing ACM should be set aside and sampled in accordance with ASTM standards for asbestos before processing. If any asbestos is identified, then that load shall not be processed and shall be sent to an asbestos-approved landfill.

All samples shall be analyzed using Polarized Light Microscopy (PLM), EPA Test Method 600/R-93-116, OSHA testing method number ID-101, or an equivalent test method approved by Ohio EPA.

The permittee shall receive the analytical test results identifying whether asbestos is present in the post-consumer pre-processed load prior to processing such sampled load.

The permittee shall reject all loads that test positive for asbestos. The permittee may, however, retest such loads to verify the test results prior to rejection. Rejected loads shall be disposed of at a permitted asbestos waste facility.

- (5) 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 and for any visible fugitive particulate emissions from the material handling operations that are not adequately enclosed (all grinding activity, all material handling activity, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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 permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(5) above:
- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible fugitive particulate emissions were observed from the material handling operations that are not adequately enclosed (all grinding activity, all material handling activity, etc.) serving this emissions unit; and

- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
 - (3) 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.
- 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:

Fugitive particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 3.5 pounds per hour and 4.6 tons per year (TPY).

Applicable Compliance Method:

The potential hourly fugitive PE limitation was determined by using the following equation from the permittee-supplied information in the application for PTIO P0109851 as submitted on February 22, 2012:

$$PE = (50 \text{ tons per hour max production}) \times (0.35 \text{ lb PE per ton production emissions factor; RACM Table 2.17-1}) \times (1 - 0.80 \text{ control efficiency}) = 3.5 \text{ pounds per hour PE controlled.}$$

Compliance with the annual fugitive PE limitation shall be determined by using the following equation from the permittee-supplied information in the application for PTIO P0109851 as submitted on February 22, 2012:

$$PE = (\text{number of tons of production per year}) \times (0.35 \text{ lb PE per ton production emissions factor; RACM Table 2.17-1}) \times (1 - 0.80 \text{ control efficiency}) / (2000 \text{ lbs/ton}).$$

PM10 emissions are assumed to be equivalent to PE.

b. Emission Limitation:

The calculated annual emission rate for fugitive PE and PM₁₀ is less than 10 tons/year, taking into account the annual production restriction and wet spray system control.

Applicable Compliance Method:

Compliance with the fugitive PE limitation shall be determined by using the following equation from the permittee-supplied information in the application for PTIO P0109851 as submitted on February 22, 2012:

$$\text{PE} = (132,000 \text{ tons per year max requested production}) \times (0.35 \text{ lb PE per ton production emissions factor; RACM Table 2.17-1}) \times (1 - 0.80 \text{ control efficiency}) / (2000 \text{ lbs/ton}) = 4.62 \text{ TPY PE controlled.}$$

PM₁₀ emissions are assumed to be equivalent to PE.

c. Emission Limitation:

NO_x emissions shall not exceed 0.031 lb/hp-hr.

CO emissions shall not exceed 0.00668 lb/hp-hr and 5.3 TPY.

VOC emissions shall not exceed 0.00247 lb/hp-hr and 2.0 TPY.

PE and PM₁₀ emissions shall not exceed 1.5 TPY.

SO₂ emissions shall not exceed 0.00205 lb/hp-hr and 1.6 TPY.

Applicable Compliance Method:

The short term emission limitations (lb/hp-hr) above are equivalent to the U.S. EPA AP-42 emission factors found in Chapter 3.3, Table 3.3-1, "Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines", dated 10/1996, and represent the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance with the lb/hp-hr emission limitations through exhaust emission tests performed in accordance with the applicable test methods in 40 CFR Part 60, Appendix A.

The annual ton per year limitations for each pollutant were developed from the following equations using the AP-42 emission factors from Chapter 3.3, Table 3.3-1, the maximum power output of the engine, the maximum hourly fuel input, and the maximum annual operating hours of the engine:

$$\text{CO} = 0.00668 \text{ lb CO /hp-hr} \times 600 \text{ Hp} \times 2640 \text{ hours/year} \times (1 \text{ ton}/2000 \text{ lbs}) = 5.3 \text{ TPY};$$

VOC = 0.00247 lb VOC /hp-hr x 600 Hp x 2640 hours/year x (1 ton/2000 lbs) = 2.0 TPY;

PE/PM₁₀ = 0.310 lb filterable PE/mmBtu x 0.141 mmBtu/gallon of diesel fuel x 26 gallons/hour x 2640 hours/year x (1 ton/2000 lbs) = 1.5 TPY; and

SO₂ = 0.00205 lb SO₂ /hp-hr x 600 Hp x 2640 hours/year x (1 ton/2000 lbs) = 1.6 TPY.

PM₁₀ was assumed to be equal to PE.

Compliance shall be based upon the record keeping in d)(1).

d. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.310 lb/mmBtu of actual heat input.

Applicable Compliance Method:

The emission limitation above is equivalent to the U.S. EPA AP-42 emission factor found in Chapter 3.3, Table 3.3-1, dated 10/1996, and represents the emissions unit's potential to emit. If required, the permittee shall demonstrate compliance with the emission limitation through exhaust emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

e. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR Part 60, Appendix A.

f. Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

- (2) Compliance with the rolling, 12-month production restriction in c)(3) shall be based on the record keeping in d)(1).
 - (3) Compliance with the annual hours of operation restriction in c)(4) shall be based on the record keeping in d)(1).
- g) **Miscellaneous Requirements**
- (1) The permittee may relocate the portable source within the State of Ohio without first obtaining a permit-to-install and operate (PTIO) or a permit-to-install (PTI), providing the appropriate exemption requirements have been met and following the approval of the Director (the appropriate Ohio EPA District Office or local air agency). The Director may issue a "Notice of Site Approval" if the following criteria is met, pursuant to the permanent exemption for portable sources in OAC rule 3745-31-03(A)(1):
 - a. the portable source is operated in compliance with any applicable best available technology (BAT) determination issued in a permit and all applicable state and/or federal rules and laws;
 - b. the portable source is operating pursuant to a currently effective PTIO or PTI and/or permit to operate (PTO) and continues to comply with the requirements of the permit;
 - c. the permittee has provided a minimum of 30 days notice of the intent to relocate the portable source to the permitting authority (the Ohio EPA District Office or local air agency that has issued the effective current permit) prior to the scheduled relocation;
 - d. the Ohio EPA district office or local air agency having jurisdiction over the new site has determined that the permitted emissions would not cause a nuisance and would be acceptable under OAC rule 3745-15-07; and
 - e. the Director has issued a "Notice of Site Approval", stating that the proposed site is acceptable and the relocation of the portable source, along with any supporting permitted emissions (e.g. roadways or storage piles), would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site.

The portable source can be relocated upon receipt of the Director's "Notice of Site Approval" for the site.

- (2) If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01, the permittee shall submit an application and obtain a PTIO or PTI (as applicable) for the new location prior to moving the portable source.

When a portable source is located at a stationary source or at a site with multiple portable sources, the potential emissions of the portable source may be required to be added to that of the facility, in order to determine the potential to emit for Title V and PSD applicability. Relocation of any portable source that results in the creation of a



major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC rule 3745-77, which may include the requirement to apply for a Title V permit.

The "Notice of Intent to Relocate" shall be submitted to the Ohio EPA District Office or local air agency responsible for issuing the permits for the portable source. Upon receipt of the notice, the permitting office shall notify the appropriate Ohio EPA District Office or local air agency having jurisdiction over the new site. Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.