



Environmental Protection Agency

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

8/9/2011

Mr. Les Irvine  
Irvine Wood Recovery Inc.  
110 Glendale Milford Rd.  
Miami, OH 45147

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 1413000539  
Permit Number: P0108273  
Permit Type: Initial Installation  
County: Clermont

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](http://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 Hamilton County Dept. of Environmental Services 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](http://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: HCDOES





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Irvine Wood Recovery Inc.**

Facility ID:	1413000539
Permit Number:	P0108273
Permit Type:	Initial Installation
Issued:	8/9/2011
Effective:	8/9/2011
Expiration:	8/9/2021





Division of Air Pollution Control
Permit-to-Install and Operate
for
Irvine Wood Recovery Inc.

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## Authorization

Facility ID: 1413000539  
Application Number(s): A0042059  
Permit Number: P0108273  
Permit Description: PTIO for 500 hp tub grinder and Roadways for mulch making operation.  
Permit Type: Initial Installation  
Permit Fee: \$2,200.00  
Issue Date: 8/9/2011  
Effective Date: 8/9/2011  
Expiration Date: 8/9/2021  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Irvine Wood Recovery Inc.  
110 Glendale Milford Rd.  
Loveland, OH 45147

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

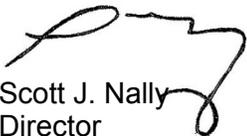
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Hamilton County Dept. of Environmental Services  
250 William Howard Taft Pkwy.  
Cincinnati, OH 45219-2660  
(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: P0108273

Permit Description: PTIO for 500 hp tub grinder and Roadways for mulch making operation.

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

<b>Emissions Unit ID:</b>	<b>F001</b>
Company Equipment ID:	Roadways and Parking
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	DuraTech HD-10 500 HP Tub Grinder
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 Hamilton County Dept. of Environmental Services 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<sup>1</sup> 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.

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<sup>1</sup>Permittees 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, Plant Roadways and Parking Areas

Operations, Property and/or Equipment Description:

Unpaved plant roadways and parking areas

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) (as effective 11/30/01)	<p>Fugitive particulate emissions (PE) from the unpaved roadways and parking areas shall not exceed 9.1 tons per year.</p> <p>Fugitive particulate 10 microns and less in diameter (PM10) emissions from the unpaved roadways and parking areas shall not 2.0 tons per year.</p> <p>Fugitive particulate 2.5 microns and less in diameter (PM-2.5) emissions from the unpaved roadways and parking areas shall not exceed 0.2 ton per year.</p> <p>No visible PE from any unpaved roadway or parking area except for a period of time not to exceed three minute during any sixty minute observation period.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust [see b)(2)a. and b)(2)c., through b)(2)h.].
b.	OAC rule 3745-31-05 (A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC 3745-17-07(B)	The emission limitation specified in this rule is exempt per OAC rule 3745-07(B)(11)(e).
d.	OAC 3745-17-08(B)	See b)(2)i.

(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 PE, PM10, and PM2.5 emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM10, and PM2.5 emissions is less than 10 tons/yr.
- c. 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.
- d. 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 unpaved 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.

- e. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- f. Any unpaved roadway or parking area that is subsequently paved, will require a permit for paved roadways and parking areas.
- g. 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.
- h. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- i. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

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>unpaved roadways and parking areas</u>	<u>minimum inspection frequency</u>
all 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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instance(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that all inspections were performed by the required frequency, and control measure(s) were properly implemented.

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 Limitations:

0.2 tons/year of fugitive PM<sub>2.5</sub>;

2.0 tons/year of fugitive PM<sub>10</sub>; and

9.1 tons/year of fugitive PE.

Applicable Compliance Method:

Compliance with fugitive PE, PM<sub>10</sub>, and PM<sub>2.5</sub> limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used.

b. Emission Limitation:

No visible PE from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed 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, DuraTech HD-10 500 HP Tub Grinder

Operations, Property and/or Equipment Description:

DuraTech HD-10 500 HP Tub Grinder

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)j.

(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) (as effective 11/30/01)	<u>Emissions from tub grinding alone:</u>  Particulate emissions (PE) shall not exceed 0.12 pound per hour and 0.18 ton per year.  Particulate matter emissions 10 microns and less in diameter (PM10)* shall not exceed 0.006 pounds per hour and 0.01 ton per year.  See b)(2)e. and b)(2)f.  <u>Emissions from the diesel engine alone:</u> Particulate emissions (PE) and particulate matter less 10 microns and less in diameter (PM10)* shall not exceed 1.1 pounds per hour and 1.8 tons per year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 3.3 pounds per hour and 5.3 tons per year.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 1.0 pounds per hour and 1.6 tons per year.</p> <p>Organic compound (OC) emissions shall not exceed 1.2 pounds per hour and 2.0 tons per year.</p> <p>Visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.</p> <p>See b)(2)a. and b)(2)f.</p> <p>The hourly emission limitations outlined under OAC rule 3745-31-05(A)(3) are based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with these limitations.</p> <p>*Particulate matter 2.5 microns and less in diameter (PM<sub>2.5</sub>) emissions are assumed to be than PM<sub>10</sub> emissions.</p>
b.	OAC rule 3745-31-05(A)(3)(b) (as effective 12/1/06)	See b)(2)b.
c.	ORC 3704.03(T)	Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 15.5 pounds per hour.
d.	OAC rule 3745-17-07(A)	Once the provisions of b)(1)b. are invoked, then the visible particulate emissions from the diesel engine exhaust stack shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-11(B)(5)(a)	Once the provisions of b)(1)b. are invoked, the particulate emissions from the diesel engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.
f.	OAC rule 3745-17-07(B)(1)	See b)(2)d.
g.	OAC rule 3745-17-08	See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-18-06(B)	Exemption from SO <sub>2</sub> regulations contained in OAC rules 3745-18-07 through 3745-18-94.
i.	OAC rule 3745-110-02(A)(2)	Exempt per OAC rule 3745-110-03(J)(3).
j.	OAC rule 3745-31-05(C) (as effective 11/30/01  Voluntary restriction to avoid state NO <sub>x</sub> modeling.	NO <sub>x</sub> emissions shall not exceed 24.9 TPY.  See c)(1).

(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 PE, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, OC and SO<sub>2</sub> emissions at this source since the uncontrolled potential to emit for PE, PM<sub>10</sub>, CO, OC and SO<sub>2</sub> emissions is less than 10 tons/yr.
- c. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).
- d. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

- e. Fugitive visible particulate emissions from the tub grinder and the loading and unloading activities associated with the tub grinder and material handling shall not exceed 20% opacity, as a three-minute average.
- f. The permittee shall employ best available control measures for the tub grinder, and the loading and unloading activities associated with the tub grinder for the purpose of ensuring compliance with the visible particulate emissions requirement. The permittee shall employ water on an 'as needed' basis to ensure compliance.

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

c) **Operational Restrictions**

- (1) The operation of this emissions unit shall not exceed 3200 hours per year based on a rolling 12-month summation of the operating hours. As this is an existing emissions unit, the permittee has records to demonstrate compliance with this requirement upon issuance of this permit.

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

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of the grinding and material handling operations in accordance with the following frequencies:

<u>grinding and material handling operation</u>	<u>minimum inspection frequency</u>
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500 HP HD-10 tub grinder and material handling	Daily
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- (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 operating conditions. No inspection shall be necessary for this material handling operation if the material used in this operation 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.
- (3) The permittee may, upon receipt of written approval from the Hamilton County Department of Environmental Services, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control 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;
- e. the information required in d)(4)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter;
- f. the operating hours for each month; and
- g. the rolling 12-month summation of the operating hours.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) The permittee shall submit deviation reports in the PER that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation.
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
  - c. the rolling 12-month summation hours of operation restriction.

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. For Tub-grinding operation:  
Emission Limitations:  
0.12 pound per hour and 0.18 ton per year of PE.  
0.006 pound per hour and 0.01 ton per year of PM10 emissions.  
Applicable Compliance Method:  
The hourly PE and PM10 emission limitations are based upon the emissions unit's potential to emit and were established by the following methodology:  
pounds of PE = (A) x (B)

where:

A = PE or PM10 emission factor, lb/ton, as referred from SCC Code 3-07-008-01 in FIRE Version 6.23.

B = maximum hourly throughput of 5.76 tons.

The tons per year annual emission limitations are based on maximum hourly emission rate multiplied by 3200 hours of operation and divided by 2000 pounds per ton.

Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

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 U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. For diesel engine:

Emission Limitations:

1.1 pounds per hour and 1.8 tons per year of PE and PM10;

3.3 pounds per hour and 5.3 tons per year of CO emissions;

1.0 pounds per hour and 1.6 tons per year of SO2 emissions;

1.2 pounds per hour and 2.0 tons per year of OC emissions; and

15.5 pounds per hour and 24.9 tons per year of NOx emissions.

Applicable Compliance Method:

The hourly emission rates for PE and PM10 emissions are based on following relationship pounds/hour PE /PM10= (A) \* (B) where

A = Emission factors (0.00220 lb of PE/hp-hr) referred from AP-42 Section 3.3 (10/96) for diesel fuel; and

B = Power output of the diesel engine (500 horsepower-hour/hour)

The hourly emission rate for NO<sub>x</sub> emissions is based on following relationship:

pounds/hourNO<sub>x</sub> = (A) \* (B); where

A = Emission factors (0.031 lb of NO<sub>x</sub>/hp-hr) referred from AP-42 Section 3.3 (10/96) for diesel fuel; and

B = Power output of the diesel engine (500 horsepower-hour/hour)

The hourly emission rate for CO is based on following relationship:

pounds/hour = (A) \* (B); where

A = Emission factors (0.00668 lb of CO/hp-hr) referred from AP-42 Section 3.3 (10/96) for diesel fuel; and

B = Power output of the diesel engine (500 horsepower-hour/hour)

The hourly emission rate for SO<sub>2</sub> is based on following relationship:

pounds/hour = (A) \* (B); where

A = Emission factors (0.00205 lb of SO<sub>2</sub>/hp-hr) referred from AP-42 Section 3.3 (10/96) for diesel fuel; and

B = Power output of the diesel engine (500 horsepower-hour/hour)

The hourly emission rate for CO is based on following relationship:

pounds/hour emissions = (A) \* (B); where

A = Emission factors (0.00247 lb of TOC/hp-hr) referred from AP-42 Section 3.3 (10/96) for diesel fuel; and

B = Power output of the diesel engine (500 horsepower-hour/hour).

The tons per year emission limitations for all the above-mentioned pollutants are based on maximum hourly emission rates multiplied by 3200 maximum hours of operation per year and divided by 2000 pounds per ton.

g) Miscellaneous Requirements

(1) None.