



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

10/14/2016

Certified Mail

George Meese
L.J. SMITH, INC.
35280 SCIO BOWERSTON ROAD
BOWERSTON, OH 44695

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0634000064
Permit Number: P0118564
Permit Type: Renewal
County: Harrison

Dear Permit Holder:

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

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
L.J. SMITH, INC.**

Facility ID:	0634000064
Permit Number:	P0118564
Permit Type:	Renewal
Issued:	10/14/2016
Effective:	10/14/2016
Expiration:	10/14/2026



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

for
L.J. SMITH, INC.

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Final Permit-to-Install and Operate
L.J. SMITH, INC.
Permit Number: P0118564
Facility ID: 0634000064
Effective Date: 10/14/2016

Authorization

Facility ID: 0634000064
Application Number(s): A0052842
Permit Number: P0118564
Permit Description: Renewal PTIO for roadways, woodwaste storage, and fabric filters.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 10/14/2016
Effective Date: 10/14/2016
Expiration Date: 10/14/2026
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

L.J. SMITH, INC.
35280 SCIO BOWERSTON ROAD
BOWERSTON, OH 44695

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

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

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0118564

Permit Description: Renewal PTIO for roadways, woodwaste storage, and fabric filters.

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:	Driveways & Parking
Superseded Permit Number:	P0089412
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	NorbFab System
Superseded Permit Number:	P0089413
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F003
Company Equipment ID:	Sawdust Silo
Superseded Permit Number:	P0089416
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F004
Company Equipment ID:	B & F System #5
Superseded Permit Number:	P0089414
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F005
Company Equipment ID:	B & F System #6
Superseded Permit Number:	P0089417
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F006
Company Equipment ID:	Wood Grinder
Superseded Permit Number:	P0089415
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
L.J. SMITH, INC.
Permit Number: P0118564
Facility ID: 0634000064
Effective Date: 10/14/2016

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



Final Permit-to-Install and Operate
L.J. SMITH, INC.
Permit Number: P0118564
Facility ID: 0634000064
Effective Date: 10/14/2016

B. Facility-Wide Terms and Conditions



Final Permit-to-Install and Operate

L.J. SMITH, INC.

Permit Number: P0118564

Facility ID: 0634000064

Effective Date: 10/14/2016

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



Final Permit-to-Install and Operate
L.J. SMITH, INC.
Permit Number: P0118564
Facility ID: 0634000064
Effective Date: 10/14/2016

C. Emissions Unit Terms and Conditions



1. F001, Roadways & Parking

Operations, Property and/or Equipment Description:

Paved and unpaved roadways and parking areas with a maximum VMT of 12,401 miles (supersedes PTI 17-753 issued 2/14/1990).

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)	Fugitive particulate emission (PE) for unpaved roadways and parking areas shall not exceed 0.96 tons/year. Fugitive PE for paved roadways and parking areas shall not exceed 0.02 tons/year. No visible fugitive PE except for 3 minutes during any 60-minute period from unpaved roadways and parking areas. No visible fugitive PE except for one minute during any 60-minute period from paved roadways and parking areas. Best available control measures that are sufficient to minimize or eliminate visible



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emissions of fugitive dust. See b)(2)a. through b)(2)i.
b.	OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B)	See b)(2)j.

(2) Additional Terms and Conditions

- a. The paved roadway and parking area that are covered by this permit and subject to the above-mentioned requirements are listed below:

 entrance drive, and

 shipping pad
- b. The unpaved roadway and parking area that are covered by this permit and subject to the above-mentioned requirements are listed below:

 rear plant access, and

 employee parking area
- c. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadway and parking area by sweeping and watering at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- d. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadway and parking area with limestone resurfacing at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

- f. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measures specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emissions limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions except for one minute during any 60-minute period.
 - g. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
 - h. 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.
 - i. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
 - j. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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 emissions incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

e) Reporting Requirements

- (1) The 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.
- (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 Limitation:

Fugitive particulate emission (PE) for unpaved roadways shall not exceed 0.96 tons/year.

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emissions factor equations in Section 13.2.2 in Compilation of Air Pollutant Emission Factors, AP-42 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roadways shall be used.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$PE = ((E \times VMT) / 2,000(\text{lbs/ton})) \times 0.10$$

$$E = ((k(s/12)^a(W/3)^b) \times ((365-p)/365))$$



$$E = ((4.9(6.4/12)^{0.7})(2.59877/3)^{0.45}) \times ((365-140)/365)$$

$$E = 1.82 \text{ lb/VMT}$$

$$PE = ((1.82 \times 10,535) / 2,000) \times 0.10$$

$$PE = 0.96 \text{ ton/year}$$

Where:

E = size-specific emission factor (lb/VMT) (AP-42 Section 13.2.2 (11/06))

k = 4.9, PM-30 constant (lb/VMT) (AP-42 Table 13.2.2-2 (11/06))

s = 6.4, surface material silt content (%)

a = 0.7, PM-30 constant (AP-42 Table 13.2.2-2 (11/06))

W = 2.59877, mean vehicle weight (tons)

b = 0.45, PM-30 constant (AP-42 Table 13.2.2-2 (11/06))

p = 140, number of days in a year with at least 0.254 mm (0.01 in) of precipitation

VMT = 10,535, vehicle miles traveled per year

90% total control efficiency = 10% emissions released (0.10)

b. Emissions Limitation:

No visible fugitive PE except for 3 minutes during any 60-minute period from unpaved roadways and parking areas.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

c. Emissions Limitation:

Fugitive particulate emission (PE) shall not exceed 0.02 tons/year.

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emissions factor equations in Section 13.2.2 in Compilation of Air Pollutant Emission Factors, AP-42 (revised 11/06) for unpaved roadways and 13.2.1 in Compilation of Air Pollutant Emission Factors, AP-42 (revised 1/11) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roadways shall be used.

Compliance with the annual emissions limitation shall be demonstrated by the following calculation:

$$PE = ((E \times VMT) / 2,000(\text{lbs/ton})) \times 0.10$$

$$E = (k (sL)^{0.91} \times (W)^{1.02}) \times (1 - (P/(4 \times 365)))$$

$$E = (0.011 (12)^{0.91} \times (2)^{1.02}) \times (1 - (140/(4 \times 365)))$$



$$E = 0.19 \text{ lb/VMT}$$

$$PE = ((0.19 \times 1,866) / 2,000) \times 0.10$$

$$PE = 0.02 \text{ ton/year}$$

Where:

E = size-specific emission factor (lb/VMT) (AP-42 Section 13.2.2 (11/06))

k = 0.011, PM-30 constant (lb/VMT) (AP-42 Table 13.2.1-1 (1/11))

sL = 12 (concrete) road surface silt loading (grams per square meter) (g/m²)

W = 2, mean vehicle weight (tons)

p = 140, number of days in a year with at least 0.254 mm (0.01 in) of precipitation

VMT = 1,866, vehicle miles traveled per year

90% total control efficiency = 10% emissions released (0.10)

d. Emissions Limitation:

No visible PE except for one minute during any 60-minute period from paved roadways and parking areas.

Applicable Compliance Method:

Compliance with the fugitive dust control measures shall be demonstrated by the monitoring and record keeping requirements in section d) of these terms and conditions.

If required, visible particulate emissions shall be determined according to USEPA Method 22.

g) Miscellaneous Requirements

- (1) None.

2. F002, Norbfab System

Operations, Property and/or Equipment Description:

Norbfab System; woodworking operations with automatic turning lathes controlled with a cyclone, installed on 5/1/1989 (supersedes PTI 17-753 issued 2/14/1990)

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)	Particulate emission (PE) shall not exceed 0.064 lb/hr and 0.28 ton/year. Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11	See b)(2)a.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, this emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because

the emissions unit is not subject to a mass emission limitation in OAC rule 3745-17-11.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

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

e) Reporting Requirements

- (1) The 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.
- (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 Limitation:

Particulate emission (PE) shall not exceed 0.064 lb/hr

Applicable Compliance Method:

The short term emissions limitation was established based on the following calculation:

$$PE = [\% \text{ of total wood waste controlled by Norbfab cyclone} \times \text{percentage of total wood dust with a weight-fraction of particles less than } 45 \mu\text{m} \times 2000 \text{ (lb/ton)}] \times (1 - \text{total control efficiency of cyclone})$$

$$PE = (0.08 \text{ ton/hr} \times 0.004 \times 2000 \text{ lb/ton}) \times (1 - 0.90)$$

$$PE = 0.064 \text{ lb/hr}$$

Compliance with the annual limitation is based on the following calculation:

$$PE = [(\text{short term uncontrolled emissions limitation}^* \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - \text{total control efficiency of cyclone})$$

$$PE = [(0.64 \text{ lb/hr} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - 0.90)$$

$$PE = 0.28 \text{ ton/year}$$

Where:

% of total wood waste controlled by Norbfab cyclone= 8%, 0.08 ton/hr

Percentage of total wood dust with a weight-fraction of particles less than 45 μm (PM₄₅) = 0.4%, 0.004

Total control efficiency of cyclone= 90%, 0.90

*Short term uncontrolled emissions limitation = % of total wood waste controlled by Norbfab cyclone \times Percentage of total wood dust with a weight-fraction of particles less than 45 μm \times 2000 (lb/ton) = 0.64 lb/hr

b. Emissions Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.



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Applicable Compliance Method:

If required, visible PE shall be determined according to USEPA Method 9.

- g) Miscellaneous Requirements
 - (1) None.

3. F003, Sawdust Silo

Operations, Property and/or Equipment Description:

Wood waste storage and load-out controlled with a cyclone, installed 4/1/1993 (supersedes PTI 06-91175 issued 1/4/2001).

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)	<p>Emissions PE from the stack shall not exceed 0.79 lb/hr; 3.44 TPY.</p> <p>Emissions of fugitive PE from the load-out shall not exceed 8.76 TPY.</p> <p>Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.</p> <p>Visible fugitive PE shall not exceed twenty percent opacity as a three-minute average.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B)	See b)(2)a.
c.	OAC rule 3745-17-11(B) and OAC rule 3745-17-07(A)	See b)(2)b.

(2) Additional Terms and Conditions

a. This facility is not located in an area identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions are exempt from the visible particulate emission limitation and the reasonably available control measures established in OAC rule 3745-17-07 and OAC rule 3745-17-08, respectively.

a. The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).

This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to a mass emissions limitation in OAC rule 3745-17-11(B).

b. The woodworking and material handling operations that are covered by this permit and subject to the following requirements are listed below:

Wood waste storage and load-out bin controlled by a cyclone

c. The permittee shall employ best available control measures for the above-identified woodworking operations and wood waste storage bin load-out for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee will maintain 90% capture of fugitive dust from the woodworking equipment and shall unload wood waste from the baghouse through a rotary air lock and into a wood waste silo which will be emptied and unloaded into mobile trailers as needed using a telescoping tube with a reduced drop height. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

d. For each woodworking operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the daily VE checks conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measure(s) is unnecessary.

- e. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
 - f. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Tuscarawas County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
 - g. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) 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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.
- e) Reporting Requirements
- (1) The 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.

- (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:

Emission Limitations:

Emissions of particulate matter from the stack shall not exceed 0.79 lbs/hr; 3.44 TPY

Applicable Compliance Method: Compliance with these emissions limits have been determined by the use of AP-42, Table 10.4-2 (7/79) emission factor (1.0 lb. emission/ton waste stored) as shown in the following equation:

The short term emissions limitation was established based on the following calculation:

$$PE = [\text{the sum of the short term uncontrolled emissions for F002, F004, F005, F006} \times \text{the control efficiency for each emission unit}] \times (1 - \text{Total control efficiency of cyclone})$$

$$PE = [0.576 \text{ lb/hr} + 1.901 \text{ lb/hr} + 5.31 \text{ lb/hr} + 0.072 \text{ lb/hr}]$$

$$PE = 0.79 \text{ lb/hr}$$

Compliance with the annual limitation is based on the following calculation:

$$PE = [(\text{short term uncontrolled emissions limitation} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - \text{total control efficiency of cyclone})$$

$$PE = [(7.86 \text{ lb/hr} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - 0.90)$$

$$PE = 3.443 \text{ ton/year}$$

Where:

$$\text{F002 short term uncontrolled emissions} \times \text{control efficiency} = 0.64 \text{ lb/hr} \times 0.90 = 0.576 \text{ lb/hr}$$

$$\text{F004 short term uncontrolled emissions} \times \text{control efficiency} = 1.92 \text{ lb/hr} \times 0.99 = 1.901 \text{ lb/hr}$$



F005 short term uncontrolled emissions x control efficiency = 5.36 lb/hr x 0.99 = 5.31 lb/hr

F006 short term uncontrolled emissions x control efficiency = 0.08 lb/hr x 0.90 = 0.072 lb/hr

Total control efficiency of cyclone= 90%, 0.90

*Short term uncontrolled emissions limitation = the sum of the short term uncontrolled emissions for F002, F004, F005, F006 x the control efficiency for each emission unit = 7.86 lb/hr

If requested pursuant to OAC rule 3745-15-04, compliance shall be demonstrated in accordance with the stack testing requirements specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures in OAC rule 3745-17-03(B).

a. Emission Limitations:

Emissions of fugitive particulate matter from the load-out shall not exceed 8.76 TPY

Applicable Compliance Method: Compliance with these emissions limits have been determined by the use of AP-42, Table 10.4-2 (7/79) emission factor (2.0 lb. emission/ton waste loaded).

Compliance with this limitation is based on the following calculation:

PE = [Max load-out ton/yr x Percentage of total wood dust with a weight-fraction of particles less than 45 μm x 2000 (lb/ton)] x (1- total control efficiency of canvas sleeve)

PE = [8760 tons/hr x 0.004 x 2000 lb/ton] x (1-0.75)

PE = 8.76 lb/hr

Where:

Max load-out ton/yr = 8760 tons/yr (input of 1 ton/hr x 8760 hrs/yr)

Percentage of total wood dust with a weight-fraction of particles less than 45 μm (PM45) = 0.4%, 0.004

Total control efficiency of canvas sleeve= 75%, 0.75

b. Emission Limitation:

Visible fugitive particulate emissions shall not exceed twenty percent opacity as a three-minute average.



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Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recordkeeping in section d) of this permit.

If required by the Ohio EPA Southeast District Office, compliance shall be determined by the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) None.

4. F004, B & F System #5

Operations, Property and/or Equipment Description:

B & F System #5; woodworking operations including with automatic turning lathes, chop saws, st. line saw, abrasive planer, CNC routers and other wood working equipment controlled by a fabric filter; formerly classified as P001 but new ID (F004) assigned on 4/1/1993 (supersedes PTI 17-753 issued 2/14/1990).

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)	Emissions of particulate matter from the stack shall not exceed 0.019 lb/hr; 0.084 TPY. Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11	See b)(2)a.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, this

emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to a mass emission limitation in OAC rule 3745-17-11.

c) Operational Restrictions

- a. None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

e) Reporting Requirements

- (1) The 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.
- (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:

Emissions of particulate matter from the stack shall not exceed 0.019 lb/hr; 0.084 TPY.

Applicable Compliance Method:

The short term emissions limitation was established based on the following calculation:

$$PE = [\% \text{ of total wood waste controlled by B\&F System \#5} \times \text{Percentage of total wood dust with a weight-fraction of particles less than } 45 \mu\text{m} \times 2000 \text{ (lb/ton)}] \times (1 - \text{total control efficiency of baghouse})$$

$$PE = (0.24 \text{ ton/hr} \times 0.004 \times 2000 \text{ lb/ton}) \times (1 - 0.99)$$

$$PE = 0.019 \text{ lb/hr}$$

Compliance with the annual limitation is based on the following calculation:

$$PE = [(\text{short term uncontrolled emissions limitation}^* \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - \text{total control efficiency of baghouse})$$

$$PE = [(1.92 \text{ lb/hr} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - 0.99)$$

$$PE = 0.084 \text{ ton/year}$$

Where:

% of total wood waste controlled by B&F System #5 = 24%, 0.24 ton/hr

Percentage of total wood dust with a weight-fraction of particles less than 45 μm (PM₄₅) = 0.4%, 0.004

Total control efficiency of baghouse = 99%, 0.99

*Short term uncontrolled emissions limitation = % of total wood waste controlled by B&F System #5 x Percentage of total wood dust with a weight-fraction of particles less than 45 μm x 2000 (lb/ton) = 1.92 lb/hr

a. Emissions Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.



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Applicable Compliance Method:

If required, visible PE shall be determined according to USEPA Method 9.

- g) Miscellaneous Requirements
 - (1) None.

5. F005, B & F System #6

Operations, Property and/or Equipment Description:

B & F System #6; woodworking operations including wood shaping activities vented to a fabric filter, installed on 4/1/1993 (supersedes PTI 06-91175 issued 1/4/2001).

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)	Emissions of particulate matter from the stack shall not exceed 0.054 lb/hr; 0.235 TPY. Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11	See b)(2)a.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, this emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because

the emissions unit is not subject to a mass emission limitation in OAC rule 3745-17-11.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

e) Reporting Requirements

- (1) The 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.
- (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 Limitation:

Emissions of particulate matter from the stack shall not exceed 0.054 lb/hr; 0.235 TPY.

Applicable Compliance Method:

The short term emissions limitation was established based on the following calculation:

$$PE = [\% \text{ of total wood waste controlled by B\&F System \#6} \times \text{Percentage of total wood dust with a weight-fraction of particles less than } 45 \mu\text{m} \times 2000 \text{ (lb/ton)}] \times (1 - \text{total control efficiency of baghouse})$$

$$PE = (0.67 \text{ ton/hr} \times 0.004 \times 2000 \text{ lb/ton}) \times (1 - 0.99)$$

$$PE = 0.054 \text{ lb/hr}$$

Compliance with the annual limitation is based on the following calculation:

$$PE = [(\text{short term uncontrolled emissions limitation} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - \text{total control efficiency of baghouse})$$

$$PE = [(5.36 \text{ lb/hr} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - 0.99)$$

$$PE = 0.235 \text{ ton/year}$$

Where:

% of total wood waste controlled by B&F System #6 = 67%, 0.67 ton/hr

Percentage of total wood dust with a weight-fraction of particles less than 45 μm (PM₄₅) = 0.4%, 0.004

Total control efficiency of baghouse = 99%, 0.99

*Short term uncontrolled emissions limitation = % of total wood waste controlled by B&F System #6 x Percentage of total wood dust with a weight-fraction of particles less than 45 μm x 2000 (lb/ton) = 5.36 lb/hr

b. Emissions Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.



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Applicable Compliance Method:

If required, visible PE shall be determined according to USEPA Method 9.

- g) Miscellaneous Requirements
 - (1) None.

6. F006, Wood Grinder

Operations, Property and/or Equipment Description:

Wood grinder used to process scrap wood from the manufacturing process controlled with a cyclone installed on 10/1/1999 (supersedes PTI 17-1659 issued 11/24/1999).

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)	Emissions of particulate matter from the stack shall not exceed 0.008 lb/hr; 0.035 TPY. Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A) and OAC rule 3745-17-11	See b)(2)a.

(2) Additional Terms and Conditions

a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, this emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because

the emissions unit is not subject to a mass emission limitation in OAC rule 3745-17-11.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

e) Reporting Requirements

- (1) The 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.
- (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. Emission Limitation:

Emissions of particulate matter from the stack shall not exceed 0.008 lb/hr; 0.035 TPY.

Applicable Compliance Method:

The short term emissions limitation was established based on the following calculation:

$$PE = [\% \text{ of total wood waste controlled by wood grinder} \times \text{Percentage of total wood dust with a weight-fraction of particles less than } 45 \mu\text{m} \times 2000 \text{ (lb/ton)}] \times (1 - \text{total control efficiency of cyclone})$$

$$PE = (0.01 \text{ ton/hr} \times 0.004 \times 2000 \text{ lb/ton}) \times (1 - 0.90)$$

$$PE = 0.008 \text{ lb/hr}$$

Compliance with the annual limitation is based on the following calculation:

$$PE = [(\text{short term uncontrolled emissions limitation} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - \text{total control efficiency of cyclone})$$

$$PE = [(0.08 \text{ lb/hr} \times 8760 \text{ hr/year}) / 2000 \text{ lb/ton}] \times (1 - 0.90)$$

$$PE = 0.035 \text{ ton/year}$$

Where:

% of total wood waste controlled by wood grinder = 1%, 0.01 ton/hr

Percentage of total wood dust with a weight-fraction of particles less than 45 μm (PM₄₅) = 0.4%, 0.004

Total control efficiency of cyclone = 90%, 0.90

*Short term uncontrolled emissions limitation = % of total wood waste controlled by wood grinder × Percentage of total wood dust with a weight-fraction of particles less than 45 μm × 2000 (lb/ton) = 0.08 lb/hr

b. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10 percent opacity as a six-minute average.



Final Permit-to-Install and Operate
L.J. SMITH, INC.
Permit Number: P0118564
Facility ID: 0634000064
Effective Date: 10/14/2016

Applicable Compliance Method:

If required, visible PE shall be determined according to USEPA Method 9.

- g) Miscellaneous Requirements
 - (1) None.