



Environmental Protection Agency

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

4/12/2012

Atlee Kaufman
77 Coach Supply, Ltd
7426 County Road 77
Millersburg, OH 44654

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0238000219
Permit Number: P0108831
Permit Type: Initial Installation
County: Holmes

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
77 Coach Supply, Ltd**

Facility ID:	0238000219
Permit Number:	P0108831
Permit Type:	Initial Installation
Issued:	4/12/2012
Effective:	4/12/2012
Expiration:	12/19/2018



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

for
77 Coach Supply, Ltd

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Authorization

Facility ID: 0238000219

Application Number(s): A0042853, A0043966

Permit Number: P0108831

Permit Description: Initial Installation PTIO of B002 - 814 BHp natural gas-fired reciprocating internal combustion engine with restricted operating hours to limit potential NOx & CO emissions; P006 - woodworking system #2 with woodworking process vented to baghouse MAC144MPH361 to control PE and wood waste transfer process from baghouse MAC144MPH361 to cyclone #1 to silo #1 that vents to baghouse 160HPT to control PE.

Permit Type: Initial Installation

Permit Fee: \$700.00

Issue Date: 4/12/2012

Effective Date: 4/12/2012

Expiration Date: 12/19/2018

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

77 Coach Supply, Ltd
7426 County Road 77
Millersburg, OH 44654

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

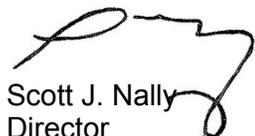
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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: P0108831

Permit Description: Initial Installation PTIO of B002 - 814 BHp natural gas-fired reciprocating internal combustion engine with restricted operating hours to limit potential NOx & CO emissions; P006 - woodworking system #2 with woodworking process vented to baghouse MAC144MPH361 to control PE and wood waste transfer process from baghouse MAC144MPH361 to cyclone #1 to silo #1 that vents to baghouse 160HPT to control PE.

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

Emissions Unit ID:	B002
Company Equipment ID:	Natural Gas Engine #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P006
Company Equipment ID:	Mill #1
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 Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Although Ohio EPA has determined that this Generally Available Control Technology NESHAP (GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website:
<http://www.epa.gov/ttn/atw/area/arearules.html>.

C. Emissions Unit Terms and Conditions



1. B002, Natural Gas Engine #1

Operations, Property and/or Equipment Description:

814 bhp stationary natural gas-fired spark ignition reciprocating internal combustion engine #1

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

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

a. b(1)b, b(2)d, d(4), d(5), e(2)d, f(1)f, f(1)g, f(1)h and f(1)i

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

Table with 2 columns: Applicable Rules/Requirements and Applicable Emissions Limitations/Control Measures. Row 1: a. OAC rule 3745-31-05(A)(3) as effective 11/30/01. Visible particulate emissions (PE) from the exhaust stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average, except as provided by the rule. The PE rate shall not exceed 0.79 ton/year. See b)(2)a and b)(2)b. Non-methane hydrocarbon (NMHC) emissions shall not exceed 1.314 grams per kilowatt-hour (g/KW-hr), 0.98 gram/brake horsepower-hr (g/bhp-hr) and 3.81 tons per year. See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 2.548 g/KW-hr (1.9 g/bhp-hr) for operations through October 18, 2013. See b)(2)c.</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 6.84 g/KW-hr (5.1 g/bhp-hr).</p>
b.	OAC rule 3745-31-05(A)(3) as effective 12/01/06	See b)(2)c and d)(4).
c.	OAC rule 3745-31-05(F) - Voluntary restriction to limit allowable CO and NO _x emissions and avoid toxic air contaminant dispersion modeling	<p>CO emissions shall not exceed 7.37 tons per year.</p> <p>See b)(2)d.</p> <p>NO_x emissions shall not exceed 9.90 tons per year.</p> <p>See b)(2)d.</p>
d.	OAC rule 3745-17-07(A)(1)	<p>The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan, the following visible particulate emission limitation required by this rule will replace the visible particulate emission limitation listed in b)(1)a:</p> <p>Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.</p>
e.	OAC rule 3745-17-11(B)(5)(b)	The PE rate shall not exceed 0.062 pound per million Btu (lb/mmBtu) of actual heat input.

f.	OAC rule 3745-18-06(G)	Pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from OAC rule 3745-18-06(G) limits for sulfur dioxide emissions during any calendar day in which natural gas is the only fuel burned. See c)(1).
g.	40 CFR Part 63, Subpart ZZZZ	See B.2.

(2) Additional Terms and Conditions

- a. The PE rate is assumed to be comprised of particulate matter with a diameter of no more than ten micrometers (PM₁₀).
- b. 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.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of PE and NMHC specified in b)(1)a from this air contaminant source since the uncontrolled potentials to emit for the emissions of PE and NMHC are less than 10 tons per year.

- d. This existing stationary spark ignition reciprocating internal combustion engine, manufactured on April 2, 1993 which commenced before June 12, 2006, at an area source of hazardous air pollutant (HAP) emissions must comply with the applicable emissions limitations and operating limitations in 40 CFR Part 63, Subpart ZZZZ no later than October 19, 2013; see B.2.
- e. PTIO P0108831 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment), as proposed by the permittee, for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - i. 4325 operating hours/year.

- c) Operational Restrictions
 - (1) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
 - (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the hours of operation, when the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be a non-resettable meter and shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
 - (3) 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 eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

- (4) Once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan, the following daily VE check requirement will replace the daily VE check requirement listed in d)(3):

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 emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

The permittee may, upon receipt of written approval from the appropriate Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

- (5) The permittee shall maintain monthly records of the following information:
 - a. the operating hours for each month; and
 - b. the annual operating hours for the calendar year, which is a summation of the monthly operating hours as required in d)(5)a.
- (6) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified federally enforceable permit-to-install and operate (PTIO) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

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 PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements:
 - a. an identification of each day when a fuel other than natural gas was burned in this emissions unit and an identification of the type and quantity of non-natural gas fuel burned;
 - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions; and
 - d. alleceedances of the operating hours restriction of no more than 4325 hours/year for this emissions unit.

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:

Visible PE from the exhaust stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.
 - b. Emission Limitation:

The PE rate shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance may be determined by the following method:

The emission factor for filterable PM₁₀ or filterable PM_{2.5} is 7.71×10^{-5} lb/mmBtu heat input, as found in Table 3.3-2, *Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources*, AP42 Chap. 3.2 (7/00) for a 4-stroke lean burn engine.

If required compliance with the PE limitation above shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

c. Emission Limitation:

The PE rate shall not exceed 0.79 ton/year.

Applicable Compliance Method:

Compliance may be determined by the following equation:

$$PE = EF_{PE} \times \text{mmBtu/hr} \times \text{HRS} \times \text{ton PE}/2000 \text{ lbs PE}$$

where:

PE = the restricted, uncontrolled PE rate, as PM₁₀, which is estimated to be 0.0001 ton PE/year;

EF_{PE} = the emissions factor of 7.71×10^{-5} lb/mmBtu heat input as found in Table 3.3-2, *Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources*, AP42 Chap. 3.2 (7/00) for a 4-stroke lean burn engine;

mmBtu/hr = the maximum heat input, which is estimated to be 5.88 mmBtu/hr, by the following formula: $814 \text{ bhp-hr}_{\text{OUTPUT}} \times 7221 \text{ Btu}_{\text{INPUT}}/\text{bhp-hr}_{\text{OUTPUT}} \times \text{mmBtu}_{\text{INPUT}}/10^6 \text{ Btu}_{\text{INPUT}}$;

HRS = the operating hours restriction, 4325 hours/year, specified in b)(2)d; and

ton PE/2000 lbs PE = a factor to convert lbs PE to tons PE.

d. Emission Limitation:

NMHC emissions shall not exceed 1.314 g/KW-hr and 0.98 g/bhp-hr.

Applicable Compliance Method:

Compliance may be determined by the following equation:

$$EF_{\text{NMHC}_{\text{GRAMS}/\text{KW-HR}}} = EF_{\text{NMHC}_{\text{GRAMS}/\text{BHP-HR}}} \times \text{bhp-hr}/0.7457 \text{ KW-hr}$$

where:

EF_{NMHC_{GRAMS}/KW-HR} = the worst case emissions factor for non-methane hydrocarbons was estimated to be 1.314 grams NMHC/KW-hr;

EF NMHC_{GRAMS/BHP-HR} = the worst case emissions factor of 0.98 gram NMHC/brake horsepower-hr (gram/bhp-hr) at an 814 bhp-hour output is noted in the Caterpillar G3512LE Gas Generator Set Engine Performance (Specifications) as noted in the application for PTIO# P0108831; and

bhp-hr/0.7457 KW-hr = a factor to convert brake horsepower-hour to kilowatt-hour.

If required, the permittee shall demonstrate compliance with the emission limitation through exhaust emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

e. Emission Limitation:

NMHC emissions shall not exceed 3.81 tons/year.

Applicable Compliance Method:

Compliance may be determined by the following equation:

$$\text{NMHC} = \text{EF NMHC}_{\text{GRAMS/BHP-HR}} \times \text{lb NMHC}/453.59 \text{ grams NMHC} \times \text{OUTPUT} \times \text{HRS} \times \text{ton NMHC}/2000 \text{ lbs NMHC}$$

where:

NMHC = the restricted, uncontrolled NMHC rate, which is estimated to be 3.81 ton NMHC/year;

EF NMHC_{GRAMS/BHP-HR} = the worst case emissions factor of 0.98 grams NMHC/bhp-hr at an 814 bhp-hour output as noted in e;

lb NMHC/453.59 grams NMHC = factor to convert grams NMHC to pounds NMHC;

OUTPUT = the output, which yields the highest emissions rate, which is 814 bhp-hr, as noted in the application for PTIO# P0108831;

HRS = the operating hours restriction, 4325 hours/year, specified in b)(2)d; and

ton NMHC/2000 lbs NMHC = a factor to convert lbs NMHC to tons NMHC.

f. Emission Limitation:

NO_x emissions shall not exceed 6.84 g/KW-hr (5.1 g/bhp-hr).

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

$$\text{NO}_x \text{ GRAMS/KW-HR} = \text{EF NO}_x \text{ GRAMS/BHP-HR} \times \text{bhp-hr}/0.7457 \text{ KW-hr}$$

where:

NO_x GRAMS/KW-HR = the worst case emissions rate is estimated to be 6.84 grams of NO_x/KW-hr at a 407 bhp-hour output;

EF NO_x GRAMS/BHP-HR = the worst case emissions factor of 5.1 grams NO_x/bhp-hr at a 407 bhp-hour output is noted in the Caterpillar G3512LE Gas Generator Set Engine Performance (Specifications) in the application for PTIO# P0108831; and

bhp-hr/0.7457 KW-hr = a factor to convert brake horsepower-hour to kilowatt-hour.

If required, the permittee shall demonstrate compliance with the emission limitation through exhaust emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

g. Emission Limitation:

NO_x emissions shall not exceed 9.90 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

$$\text{NO}_x = \text{EF NO}_x \text{ GRAMS/BHP-HR} \times \text{lb NO}_x/453.59 \text{ grams NO}_x \times \text{BHP-HR} \\ \times \text{HRS/YEAR} \times \text{ton NO}_x/2000 \text{ lbs NO}_x$$

where:

NO_x = the restricted, uncontrolled annual rate, which is estimated to be 9.90 tons NO_x/year;

BHP-HR = the output of 407 bhp-hr when the worst case emissions factor of 5.1 grams NO_x/bhp-hr is noted in the Caterpillar G3512LE Gas Generator Set Engine Performance (Specifications) in the application for PTIO# P0108831;



HRS = the restricted hours of operation, which are 4325 hours/year as specified in b)(2)d; and

ton NO_x/2000 lbs NO_x = a factor to convert pounds of NO_x to tons of NO_x.

h. Emission Limitation:

CO emissions shall not exceed 2.548 g/KW-hr (1.9 g/bhp-hr) for operations through October 18, 2013.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

$$\text{CO GRAMS/KW-HR} = \text{EF CO GRAMS/BHP-HR} \times \text{bhp-hr}/0.7457 \text{ KW-hr}$$

where:

CO GRAMS/KW-HR = the emissions rate for uncontrolled CO, which yields the worst case hourly rate, which was estimated to be 2.548 grams of CO/KW-hr at a 814 bhp-hour output;

EF CO GRAMS/BHP-HR = the emissions factor of 1.9 grams CO/bhp-hr at a 814 bhp-hour output is noted in the Caterpillar G3512LE Gas Generator Set Engine Performance (Specifications) in the application for PTIO# P0108831; and

bhp-hr/0.7457 KW-hr = a factor to convert brake horsepower-hour to kilowatt-hour.

If required, the permittee shall demonstrate compliance with the emission limitations through exhaust emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

The requirement of f)(1)h shall be effective for operations through October 18, 2013; thereafter the permittee is subject to the requirements specified in B.2.

i. Emission Limitation:

CO emissions shall not exceed 7.37 tons/year.

Applicable Compliance Method:

Compliance may be demonstrated by the following equation:

$$\text{CO} = \text{EF CO GRAMS/BHP-HR} \times \text{lb CO}/453.59 \text{ grams CO} \times \text{BHP-HR} \\ \times \text{HRS/YEAR} \times \text{ton CO}/2000 \text{ lbs CO}$$

where:

CO = the restricted, uncontrolled annual rate, which is estimated to be 7.37 tons/year;

HRS = the restricted hours of operation, which are 4325 hours/year as specified in b)(2)d; and

ton CO/2000 lbs CO = a factor to convert pounds of CO to tons of CO.

g) **Miscellaneous Requirements**

- (1) This emissions unit is an existing 814 brake horsepower (570 KW output, 5.88 mmBtu/hr input) stationary natural gas-fired spark ignition reciprocating internal combustion engine, since the manufacture date of April 2, 1993 commenced before January 1, 2008. It is not subject to 40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Combustion Engines (SI ICE). If this emissions unit is modified or reconstructed, as defined in 40 CFR 60.2 and 60.15, respectively, after June 12, 2006 it would be subject to the standards in Table 1 of 40 CFR Part 60 Subpart JJJJ.



2. P006, Mill #1

Operations, Property and/or Equipment Description:

Woodworking System #2: 2 cut-off saws, 1 gang rip saw, 1 straight line rip saw, 1 hog, 1 planer, 1 moulder and 1 band re-saw, each of which are vented to a baghouse (MAC144MPH361) to control particulate emissions (PE); enclosed wood waste transfer from baghouse MAC144MPH361 to cyclone #1; and wood waste load-in from cyclone #1 to silo #1 that vents to a baghouse (160HPT) to control PE

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>Visible particulate emissions (PE) shall not exceed 0% opacity, as a 6-minute average, from the woodworking process.</p> <p>PE shall not exceed 0.01 grain per dry standard cubic foot (grains/dscf) from the woodworking process.</p> <p>Visible PE shall not exceed 5% opacity, as a 6-minute average, from the silo #1 bin vent associated with the wood waste silo load-in process.</p> <p>The PE rate shall not exceed 0.02 grain/dscf from the wood waste silo load-</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		in process associated with this emissions unit and with (P001) woodworking system #1, combined.
b.	ORC 3704.03(T)	PE shall not exceed 14.18 tons/yr from the woodworking process and the wood waste silo load-in process, combined. See b)(2)a through b)(2)c.
c.	OAC rule 3745-17-07(A)(1)	The visible PE limitation required by this applicable rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3) for the woodworking process and the wood waste silo load-in process each.
d.	OAC rule 3745-17-11(B)(2)	The PE limitations required by this applicable rule are less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3) for the woodworking process and the wood waste silo load-in process each. See b)(2)d.

(2) Additional Terms and Conditions

- a. The dust capture devices (such as a hood, a fan or other equipment) to adequately enclose, contain, capture and vent particulate emissions shall be operated with a sufficient volumetric flow rate to eliminate visible particulate emissions at the point(s) of capture at the woodworking process to the extent possible with good engineering design.
- b. The emissions from this emissions unit shall be vented to baghouse MAC144MPH361 at all times that any of woodworking process equipment associated with this emissions unit is in operation.
- c. The emissions from the wood waste silo load-in process, associated with this emissions unit, and with the wood waste silo load-in process, associated with emissions unit P001, shall be vented to baghouse 160HPT when one or more of the silo load-in processes are in operation.
- d. OAC rule 3745-17-11(A)(3) requires that for the purposes of determining the allowable PE rate as specified in "Figure II" in the appendix to this rule, the total uncontrolled mass rate of emission from all similar process units at a plant, such units being united either physically or operationally, or otherwise located in close proximity to each other, shall be used for determining the maximum allowable mass rate of PE that pass through a stack or stacks from all such units. For simultaneous operation of (P001) woodworking system #1 and (P006) woodworking system #2 the combined, hourly uncontrolled silo #1 load-in

emissions was estimated to be 0.50 lb/hr. However, OAC rule 3745-17-11, Figure II, which is in the State Implementation Plan, does not have an allowable PE rate if the uncontrolled PE rate is less than 10 lbs/hr.

- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements

Woodworking Process

- (1) The permittee shall perform daily checks, when any equipment in the woodworking process associated with this 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. whether baghouse MAC144MPH361 for the woodworking process was exhausted to the ambient air or not;
 - b. the color of the emissions;
 - c. whether the emissions are representative of normal operations;
 - d. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - e. the total duration of any visible emissions incident; and
 - f. any corrective actions taken to eliminate the visible emissions.

If baghouse MAC144MPH361 for the woodworking process is not exhausted to the air then the permittee may state "Not applicable" for d)(1)b through d)(1)f.

The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

- (2) The permittee shall record on a daily basis every period of time (start time and date, and end time and date) when the woodworking process associated with this emissions unit was in operation and the process emissions were not vented to baghouse MAC144MPH361.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across baghouse MAC144MPH361 when any equipment at the woodworking process associated with this emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the

pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation;
- e. the findings and recommendations; and
- f. whether baghouse MAC144MPH361 for the woodworking process was exhausted to the ambient air or not.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by

the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

Wood Waste Load-in to Silo #1 Process

- (4) The permittee shall perform daily checks, when the wood waste silo load-in process associated with this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the silo #1 bin vent 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 eliminate the visible emissions.

The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

- (5) The permittee shall record on a daily basis every period of time (start time and date, and end time and date) when the wood waste silo load-in process associated with this emissions unit was in operation and the process emissions were not vented to baghouse160HPT.

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 PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in terms d)(1) and (4) above:
- a. all days during which any visible particulate emissions were observed from any stack serving this emissions unit;
 - b. for each day during which visible particulate emissions were observed, an identification of the stack which had observed visible particulate emissions (e.g. woodworking #2 fabric filter egress for the woodworking process or silo #1 bin vent for wood waste load-in to silo #1); and
 - c. any corrective actions taken to eliminate the visible particulate emissions.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of baghouse MAC144MPH361 for the woodworking process and the operations of baghouse 160HPT for wood waste silo load-in to silo #1 process during the 12-month reporting period for this emissions unit:
- a. any period of time (start time and date, and end time and date) when the woodworking process associated with this emissions unit was in operation and the process emissions were not vented to baghouse MAC144MPH361;
 - b. any period of time (start time and date, and end time and date) when the wood waste silo load-in process associated with this emissions unit was in operation and the process emissions were not vented to baghouse 160HPT;
 - c. each period of time (start time and date, and end time and date) when the pressure drop across baghouse MAC144MPH361 was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - d. each incident of deviation described in a. through c. above where a prompt investigation was not conducted;
 - e. each incident of deviation described in c. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - f. each incident of deviation described in a. through c. where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

f) Testing Requirements

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

a. Emission Limitations:

Visible PE from the stack serving baghouse MAC144MPH361 for the woodworking process shall not exceed 0% opacity as a 6-minute average.

Visible PE from the stack serving baghouse 160HPT for the wood waste silo load-in process shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the stack visible PE limitations shall be demonstrated through visible emissions observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE shall not exceed 0.01 grain/dscf from the woodworking process.

Applicable Compliance Methods:

Compliance may be demonstrated by the following equation:

$$PE_{WW} = Q_{STD} \times EF \times \text{lb } PE_{UNCTRL} / 7000 \text{ grains } PE_{UNCTRL} \times 60 \text{ min/hr}$$

$$\times (1 - CE) \text{ lb } PE / \text{lb } PE_{UNCTRL}$$

where:

PE_{WW} = the maximum, controlled PE rate from the woodworking process, which was estimated to be 0.000055 grain PE/dscf (0.01592 lb PE/hr);

Q_{STD} = dry standard stack flow, in accordance with 40 CFR Part 60 App. A, U.S. EPA Method 2, and was estimated to be 33,766 dry standard cubic feet per minute (dscfm) as determined from an actual flow rate of 36,414 cfm at 85°F (302.60°K, 545°R), and an estimated stack pressure of 727.63 mm Hg (14.07 psi), as noted in the application for PTIO# P0108831, and an assumed moisture content of 0.0%;

EF = uncontrolled PE rate generated from woodworking operations, which is assumed to be 0.055 grain PE_{UNCTRL} /dscf for large diameter cyclones in woodworking waste collection systems, from AP-42 *Fifth Edition, Compilation of Air Pollution Emission Factors*, Chap 10.4, Table 10.4-1 (2/80); and

CE = control efficiency of baghouse MAC144MPH361, which is 99.9% as noted in the application for PTIO# P0108831.

If required, compliance with the PE limitation above shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

c. Emission Limitation:

PE shall not exceed 0.02 grain/dscf from the wood waste silo load-in process associated with this emission unit and with (P001) woodworking system #1, combined.

Applicable Compliance Methods:

Compliance may be demonstrated by the following equation:

$$PE_{\text{LOAD-IN}} = [(V_1/HR_1) + (V_2/HR_2)] \times \text{cy wood waste}/27 \text{ cfwood waste} \times D \times EF \\ \times (1 - CE) \text{ lb PE/lb PE}_{\text{UNCTRL}} \times \text{hr}/60 \text{ min} \times Q \times 7000 \text{ grains PE/lb PE}$$

where:

$PE_{\text{LOAD-IN}}$ = the maximum, controlled PE rate from the silo load-in process, which was estimated to be 0.00029 grain PE/dscf (0.005015 lb PE/hr) from woodworking #1 (P001) and woodworking #2 (P006), combined;

V_1 = the daily wood waste generation rate from P001, which is 480 cubic feet (cf) wood waste/day, as noted in the application for PTI# 02-22654;

HR_1 = typical hours of actual operation per day at P001, which is 9 hrs/day, average, as noted in the application for PTI# 02-22654;

V_2 = the daily wood waste generation rate at P002, which is 240 cf wood waste/day, as noted in the application for PTIO# P0108831;

HR_2 = typical hours of actual operation per day at P002, which is 9 hrs/day, average, as noted in the application for PTIO# P0108831;

D = density of wood waste, which is 338.5 lbs wood waste per cubic yards wood waste as noted in the application for PTIO# P0108831;

EF = the emissions factor for uncontrolled PE, which is 1 lb PE_{UNCTRL} /2000 lbs wood waste from a wood-waste storage bin vent, *Reasonably Available Control Measures for Fugitive Dust Sources(RACM)*, Ohio EPA, Office of Air Pollution Control, Chap. 2.17, Table 2.17-1 (9/80);

CE = control efficiency of baghouse 160HPT, which is 99% as noted in the application for PTIO# P0108831; and

Q = 2000 dscf/min as noted in the application for PTIO# P0108831.

If required, compliance with the PE limitation above shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA Northeast District Office.

d. Emission Limitation:

PE shall not exceed 14.18 tons/yr from the woodworking process and the wood waste silo load-in process, combined.

Applicable Compliance Method:

The maximum, controlled rate may be demonstrated by the following equation:

$$PE_{TOTAL} = [(PE_{WW} \times Q_{STD}) + (PE_{LOAD-IN} \times Q)] \times (60 \text{ min/hr}) \times (8760 \text{ hrs/yr})$$

x (lb PE/7000 grains PE) x (ton PE/2000 lbs PE)

where:

PE_{TOTAL} = the maximum, controlled annual PE rate from the woodworking process and the wood waste silo load-in process, combined, which is estimated to be 0.092 ton PE/yr.

g) Miscellaneous Requirements

- (1) Wood waste within storage silo #1 is augered to a surge hopper and then transferred to the surge auger to feed (B001) 4.42 mmBtu/hr wood-waste fired boiler. The wood waste auger system(s) is enclosed, so that no PE is generated during wood waste load-out from silo #1.
- (2) Small particles of wood waste generated at process equipment associated with P001 are captured and vented to cyclone #1. The captured wood waste within cyclone #1 are transferred to wood waste storage silo #1, which also stores wood waste that is generated at emissions unit P006.
- (3) Large wood scrap pieces, generated at the woodworking process equipment associated with this emissions unit, can fall to the floor, onto a conveyor or may be placed within a cart. The large wood scraps, generated at this emissions unit as well and at (P001) woodworking process #1, will be manually loaded into a dumpster. Load-in of large wood scrap pieces into a dumpster will occur independently from the woodworking process associated with this emissions unit and from the process equipment associated with emissions unit P001. The potential, uncontrolled PE rate was estimated to be less than ten pounds per day. The wood scrap load-in emissions unit is within the de minimis emissions levels as specified in OAC rule 3745-15-05(B) and is not subject to the permit requirements of OAC rule 3745-31-02(A).