



Environmental Protection Agency

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

10/5/2012

Ivan Miller  
Keim Lumber Co  
PO BOX 40  
CHARM, OH 44617

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0238000141  
Permit Number: P0084709  
Permit Type: Renewal  
County: Holmes

Certified Mail

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

Dear Permit Holder:

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

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

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

If you have any questions, please contact 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](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO





**FINAL**

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

Facility ID:	0238000141
Permit Number:	P0084709
Permit Type:	Renewal
Issued:	10/5/2012
Effective:	10/5/2012
Expiration:	10/5/2022





Division of Air Pollution Control
Permit-to-Install and Operate
for
Keim Lumber Co

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? ..... 4
3. What records must I keep under this permit? ..... 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
7. What reports must I submit under this permit? ..... 5
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? ..... 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
15. What happens if a portion of this permit is determined to be invalid? ..... 7
B. Facility-Wide Terms and Conditions ..... 8
C. Emissions Unit Terms and Conditions..... 10
1. P001, Woodworking Operations..... 11
2. R001, spray coating operation ..... 16



## Authorization

Facility ID: 0238000141  
Application Number(s): A0015278, A0045458  
Permit Number: P0084709  
Permit Description: PTIO Renewal for woodworking shop, wood finishing operation, and woodwaste silo controlled by three parallel dust collection systems.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 10/5/2012  
Effective Date: 10/5/2012  
Expiration Date: 10/5/2022  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Keim Lumber Co  
PO Box 6  
Clark Twp., OH 44617

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

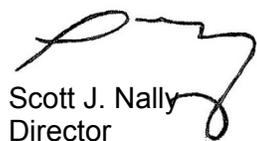
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0084709  
Permit Description: PTIO Renewal for woodworking shop, wood finishing operation, and woodwaste silo controlled by three parallel dust collection systems.

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

<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	Woodworking Operations
Superseded Permit Number:	02-22607
General Permit Category and Type:	Not Applicable

<b>Emissions Unit ID:</b>	<b>R001</b>
Company Equipment ID:	spray coating operation
Superseded Permit Number:	02-22505
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 submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

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

## **B. Facility-Wide Terms and Conditions**

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

## **C. Emissions Unit Terms and Conditions**



1. P001, Woodworking Operations

Operations, Property and/or Equipment Description:

Woodworking shop and woodwaste silo controlled by three parallel dust collection systems

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)	See b)(2)a, b(2)b, b(2)e; c)(1), c)(2), c)(3)
b.	OAC rule 3745-17-08(B)	See 2)c.
c.	OAC rule 3745-17-07(B)	See 2)d.
d.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. Particulate emissions (PE) shall not exceed 0.01 grain per dscf of exhaust gas of each baghouse. Baghouse #1 PE shall not exceed 4.54 pounds per hour and 6.59 tons per year from the dust collector exhaust. Baghouse #2 PE shall not exceed 3.38 pounds per hour and 4.90 tons per year from the dust collector exhaust. Baghouse #3 PE shall not exceed 5.14 pounds per hour and 7.46 tons

per year from the dust collector exhaust. Fugitive PE from the wood waste silo shall not exceed 5.10 tons per year.

- b. There shall be no visible emissions from the dust collector exhausts.
- c. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located in Holmes County). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.
- d. 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).
- e. Visible emissions of fugitive dust shall not exceed twenty percent opacity, as a three-minute average during loadout.

c) Operational Restrictions

- (1) The pressure drop across the dust collectors shall be maintained within the manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.
- (2) The dust collectors shall be operated with a sufficient volumetric flow rate to eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design
- (3) During any unloading of sawdust into trucks from the dust collector silo, every attempt shall be made to reduce or control fugitive dust emissions by enclosing the area with tarps, minimizing the drop height to the truck, utilizing a truck with high side boards, or placing a covering over the discharge chute during the unloading process. The collection efficiency shall be considered adequate if there are no visible particulate emissions of fugitive dust from the fabric tube during wood waste storage silo load-out in excess of 20% opacity, as a 3-minute average.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the dust collectors while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each dust collector on a weekly basis.
- (2) When a dust collector is vented outside the building, the permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the dust collector. The presence or absence of any visible emissions from the exhausts of the dust collector shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log:
  - a. the color of the emissions;

- b. the total duration of any visible emission incident; and
- c. any corrective actions taken to eliminate the visible emissions.

NOTE: The exhaust from the dust collectors for this emissions unit is currently vented back into the building. This is the normal operating mode for this emissions unit.

- (3) The permittee shall record in an operations log any time the fabric tube or other drop height reduction tool are not in use when sawdust load out is in operation.
  - (4) The permittee shall maintain copies of these records for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
- e) Reporting Requirements
- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
  - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
  - (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d(2) above:
    - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
    - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
    - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitations:
      - 0.01 gr/dscf PE from each baghouse exhaust;
      - 4.54 lbs/hr PE from Baghouse #1;
      - 3.38 lbs/hr PE from Baghouse #2; and
      - 5.14 lbs/hr PE from Baghouse #3.

Applicable Compliance Methods:

If required compliance with the PE limitations above shall be determined according with the methods and procedures specified in 40 CFR Part 60, Appendix A.

b. Emission Limitations:

6.59 tpy PE from Baghouse #1;

4.90 tpy PE from Baghouse #2;

7.46 tpy PE from Baghouse #3.

Applicable Compliance Methods:

Compliance with the annual allowable PE limitation may be determined by the following equation:

$$(0.055 \text{ gr/dscf}) \times Q \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb}) \times (1-(0.99))$$

Where:

0.055 gr/dscf is the emission factor from AP-42, table 10.4-1 version 4/78; and Q is the dust collector flow rate; 53,000 cfm for baghouse #1; 39,400 cfm for baghouse #2; and 60,000 cfm for baghouse #3; and 99.9% is the manufacturer's guaranteed control efficiency at 1 micron.

c. Emission Limitation:

5.10 tpy fugitive PE during wood waste silo unloading

Applicable Compliance Methods:

Compliance with the annual allowable PE limitation may be determined by the following equation:

$$(2.0 \text{ lbs/ton})(83,068 \text{ cu yd/yr})(338.5 \text{ lbs/cu yd})(\text{ton}/2000\text{lbs})(\text{ton}/2000\text{lbs})$$

Where:

2.0 pounds per ton is the emission factor from AP-42, Table 10.4-2 (7/79); 83,068 is the maximum wood waste generated by the wood working shop; and 338.5 pounds per cubic yard is the weight of the wood waste.

d. Emission Limitation:

There shall be no visible emissions from the dust collector exhaust.

Applicable Compliance Methods:

Compliance with the no visible emission limit for the exhausts from the dust collector shall be determined using Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

e. Emission Limitation:

There shall be no visible emissions from the dust collector exhaust.



Applicable Compliance Methods:

Compliance with the visible fugitive emission limitation shall be determine byOAC rule 3745-17-03(B)(3), in accordance with Method 9, as set forth in 40 CFRPart 60, Appendix A.

g) Miscellaneous Requirements

- (1) None.



2. R001, spray coating operation

Operations, Property and/or Equipment Description:

Wood finishing operation including stains and finishes applied by one HVLP gun/pump and one airless gun/pump in an Auto Body Toolmart spray booth with overspray filters. Parts are manually moved and air dried.

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)d., d)(5) thru d)(8)

(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)	See b)(2)b. and b)(2)c.
b.	OAC rule 3745-31-05(E)	VOC emissions shall not exceed 25 TPY from all coatings and cleanup materials.  See b)(2)e.
c.	OAC rule 3745-17-11(C)	See b)(2)a., c)(1), (2) and c(3) and d)(9) through d)(13).
d.	OAC rule 3745-114-01	d)(5) thru d)(8)

(2) Additional Terms and Conditions

a. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA

approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

- b. On any day during which any photochemically reactive material [as defined in OAC 3725-21-01(C)(5)] is employed, the volatile organic compound (VOC) emissions from all the coatings and photochemically reactive cleanup materials shall not exceed 8 pounds per hour. [VOC emissions from any cleanup materials that is not a photochemically reactive material shall not be counted towards the 8 lbs/hr limitation]
  - c. On any day during which no photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are employed, the volatile organic compound (VOC) emissions from all the coatings shall not exceed 17.49 pounds per hour. [This limit is based upon the maximum application rate of 2.75 gallon per hour.]
  - d. The VOC content of each coating shall not exceed 6.36 pounds per gallon, as applied.
  - e. The VOC emissions from all coatings and cleanup materials from this emissions unit shall not exceed 25.0 tons per year.
- c) Operational Restrictions
- (1) All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.
  - (2) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
  - (3) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
  - (2) The permittee shall collect and record the following information for each day during which any photochemically reactive material is employed in this emissions unit:
    - a. the company identification for each photochemically reactive coating and clean up material employed;
    - b. the number of gallons of each photochemically reactive coating and cleanup material employed minus the number of gallons of each photochemically reactive coating and cleanup material recovered for disposal;

- c. the VOC content of each photochemically reactive coating and clean up material, in lbs VOC per gallon;
- d. the total emissions rate for all the photochemically reactive coatings and cleanup materials, (i.e., summation of “b” times “c”) in pounds VOC per day;
- e. the total number of hours the emissions unit was in operation;
- f. the average hourly VOC emissions rate for all photochemically reactive coatings and cleanup materials, (i.e., the quotient of “e” divided by “d”) in pounds per hour (average); and,
- g. For the calendar year annual emissions in tons/year, multiply d. \* 365 days and then divide by 2000 lbs per ton.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- (3) The permittee shall collect and record the following information for each day during which any non-photochemically reactive material is employed in this emissions unit:
  - a. The company identification for each non-photochemically reactive coatings and cleanup materials employed;
  - b. The volatile organic compound (VOC) content of non-photochemically reactive coating and cleanup material employed, in lbs/gallon, as applied;
  - c. The number of gallons of each non-photochemically reactive coatings and cleanup materials employed;
  - d. the total VOC emissions from all non-photochemically reactive coatings and cleanup materials employed, in lbs/day, i.e., summation of(b) times (c);
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly VOC emission rate for all the non-photochemically reactive coatings and cleanup materials, i.e., (d)/(e), in lbs/hr.
  - g. For the calendar year annual emissions in tons/year, multiply d. \* 365 days and then divide by 2000 lbs per ton.
- (4) The permittee shall calculate and record the annual VOC emissions from all photochemical reactive and non-photochemical reactive coatings and cleanup materials employed, in tons; [i.e., d)(2)g. + d)(3)g]
- (5) The permit to install application for this emissions unit, R001, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling

was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/\text{X} \times 5/\text{Y} = 4 \text{ TLV}/\text{XY} = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: stoddard solvent(CAS 8052-41-3)

TLV (mg/m<sup>3</sup>): 573

Maximum Hourly Emission Rate (lbs/hr): 11.27

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 5,626

MAGLC (ug/m<sup>3</sup>): 13,633

The permittee, has demonstrated that emissions of standard solvent, from emissions unit(s) R001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final permit-to-install and operate (PTIO) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- (8) 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 permittees to apply for and obtain a new or modified 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.
- (9) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (10) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (11) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (12) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be

made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (13) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Ohio EPA Northeast district office.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) Any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation;

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
17.49 pounds VOC emissions per hour (for non-photochemical reactive materials)
  - Applicable Compliance Method:  
Compliance with the hourly allowable VOC emission limitation shall be determined based upon the record keeping requirements specified in term d)(3)f. of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

8 pounds VOC emissions per hour (for photochemical reactive materials)

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation shall be determined based upon the record keeping requirements specified in term d)(2)f. of this permit.

If required, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitation in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

25.0 tons per year of VOC emissions from all coatings and cleanup materials from this emissions unit

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based upon the record keeping requirements specified in term d)(4) of this permit.

e. Emission Limitation:

6.36 pounds of VOC per gallon coating, as applied

Applicable Compliance Method:

Any determination of VOC content, solids contents, or density of coating material or cleanup material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings. In accordance with OAC rule 3745-21-04(B)(5), the permittee shall determine the composition of the coatings or cleanup material by a certified environmental data sheet supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24 or Method 24A. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

g) Miscellaneous Requirements

(1) None.