



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

9/29/2010

Peter Dunn  
P. Graham Dunn, Inc.  
1417 Zuercher Rd  
Dalton, OH 44618

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

Facility ID: 0285000461  
Permit Number: P0105922  
Permit Type: Renewal  
County: Wayne

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)

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 Kevin Boyce," 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 DAPC Web 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  
P. Graham Dunn, Inc.**

Facility ID: 0285000461  
Permit Number: P0105922  
Permit Type: Renewal  
Issued: 9/29/2010  
Effective: 9/29/2010  
Expiration: 6/9/2015





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

for
P. Graham Dunn, Inc.

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## Authorization

Facility ID: 0285000461  
Application Number(s): A0039319  
Permit Number: P0105922  
Permit Description: first issue PTIO following synthetic minor PTI  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 9/29/2010  
Effective Date: 9/29/2010  
Expiration Date: 6/9/2015  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

P. Graham Dunn, Inc.  
630 Henry Street  
Dalton, OH 44618

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 43087  
(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

  
Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0105922  
Permit Description: first issue PTIO following synthetic minor PTI

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

**Emissions Unit ID: P001**  
Company Equipment ID: Baghouse #1 (sanding)  
Superseded Permit Number: 02-22678  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: R001**  
Company Equipment ID: Spray Booth #1  
Superseded Permit Number: 02-22678  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: R002**  
Company Equipment ID: Spray Booth #2  
Superseded Permit Number: 02-22678  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: R003**  
Company Equipment ID: Spray Booth #3  
Superseded Permit Number: 02-22678  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: R004**  
Company Equipment ID: Spray Booth #4  
Superseded Permit Number: 02-22678  
General Permit Category and Type: Not Applicable

**Emissions Unit ID: R005**  
Company Equipment ID: Spray Booth #5  
Superseded Permit Number: 02-22678  
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.

**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

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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).

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, Baghouse #1 (sanding)

Operations, Property and/or Equipment Description:

CHC routes, saws, routers, shapers and sanders controlled by a 39,400 acfm baghouse, as the associated wood waste silo load-out

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 operations(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. 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 3 columns: Label, Applicable Rules/Requirements, and Applicable Emissions Limitations/Control Measures. Rows include OAC rules 3745-31-05(A)(3), 3745-17-11(B), 3745-17-07(A), 3745-17-08(B), 3745-17-07(B), and 3745-31-05(C).

- (2) Additional Terms and Conditions
- a. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
  - b. This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
  - c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to 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 ORC changes effective August 3, 2006 (S.B.265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant 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 U.S.EPA approves the revisions to OAC rule 3745-31-05, the requirements 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 3745-31-05, then these emission limits no longer apply.
  - d. This rule paragraph applies once U.S.EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install 02-22678 for this air contaminant source takes into account the use of a baghouse system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99.9% and capture efficiency of 100%, by weight for PE, and the use of telescopic tube or other drop height reduction equipment during wood waste unloading, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate and maintain equipment to monitor the pressure drop across the baghouse 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 the baghouse on a daily basis.

The pressure drop across the baghouse shall be maintained within the range recommended by the manufacturer while the emissions unit is in operation.

- (2) 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.

- (3) The permittee shall perform daily checks, when the emissions unit is in operation for any visible fugitive particulate emissions at the sawdust capture system pickup points. 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.

## 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions;
- c. all days during which any visible fugitive particulate emissions were observed from the sawdust capture system pickup points serving this emissions unit; and
- d. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions; and
- e. the permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the manufacturer's recommended range.

## f) Testing Requirements

- (1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 3.71 lbs/hr from the dust collector exhaust.

Applicable Compliance Method:

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.

b. Emission Limitation:

PE shall not exceed 9.9 tons/yr from the woodworking operations and silo unloading.

Applicable Compliance Method:

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

$[(0.055 \text{ gr/dscf}) \times (39,400 \text{ cfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb}) \times (1-.999)] + [(SD) \times (2 \text{ lbs/ton}) \times (\text{ton}/2000 \text{ lb}) \times (1-0.75)]$

where:

0.055 gr/dscf is the particulate emission factor from AP-42, Table 10.4-1 version 2/80;

39,400 cfm is the dust collector air flow rate from the permit application;

99.9% is the dust collector control efficiency;

SD is the total tons of sawdust loaded out per year, the rated maximum being 205 tons per year;

2 lbs/ton is the particulate emission factor from AP-42, Table 10.4-1 (2/80) for sawdust loadout; and

75% is the control efficiency for a telescopic tube from RACM, Table 2.17-3.

c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance with the visible particulate emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

**2. R001, Spray Booth #1**

**Operations, Property and/or Equipment Description:**

Manual coating operation No. 1 to apply water-based paint to wood pieces. Equipment consists of one manual, air assisted, airless gun/pump, booth with dry overspray filters and two associated IR drying ovens. Parts are manual moved.

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. d)(5)

(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 operations(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. 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, b)(2)c and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See b)(2)d and c)(2).

(2) Additional Terms and Conditions

a. Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compounds (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.



The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- b. Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compounds (VOC) emissions from coatings shall not exceed 2.34 pounds per hour.

The requirement to comply with this emission limitation only on days photochemically reactive coating or clean up material are not employed shall cease on the date the U.S. EPA approves revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- c. The VOC content of coatings shall not exceed 0.85 pound per gallon, as applied.
d. The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

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 maximum emissions from coating and cleanup material usage for this emissions unit and for emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons of VOC per rolling, 12-month period.

Compliance with the rolling, 12-month limitations of VOC shall be based upon the rolling, 12-month summations of the emissions of VOC.

Table with 3 columns: Tons VOC emissions current month, +, Previous 11 months tons of VOC, Total 12-month < or = 25.0 tons VOC

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 that photochemically reactive coatings or cleanup material are employed in this emissions unit:
- a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
  - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
  - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

[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 that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
- a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not employed;
  - c. the VOC content of each coating, in lbs/gallon, as applied;
  - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
  - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
  - f. the total number of hours the emissions unit was in operation; and
  - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.

- (4) The permittee shall collect and record the following information for each month for the emissions unit:
- the number of gallons of each nonphotochemically reactive cleanup material employed minus the number of gallons of nonphotochemically reactive cleanup material recovered for disposal;
  - the VOC content of each nonphotochemically reactive cleanup material, in lbs/gallon;
  - the total VOC emissions from all nonphotochemically reactive cleanup materials employed, in lbs/month, i.e., sum of (b) times (a);
  - the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period [i.e., sum of the daily VOC emissions (d)(2)h + d(3)e) and the monthly nonphotochemically reactive cleanup material VOC emission (d)(4)c) for the previous, 12-month period]; and
  - the actual VOC emissions from emissions units R001, R002, R003, R004, R005 and R006, combined, for the previous, 12-month period.
- (5) Modeling to demonstrate compliance with ORC 3704.03(F)(4)(b) ["Review of New Sources of Air Toxics Emissions, Option A."] 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. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install 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 permit to install.
- e) Reporting Requirements
- (1) The permittee submit quarterly deviation (excursion) reports that identify:
- any exceedence of the annual VOC\* emission limitation of 25.0 tons per year, as a rolling, 12-month summation, and the actual VOC emissions during each such period.
- \*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.
- The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions, Section A of this permit.
- (2) 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. any daily record showing that the dry filters were not in service when the emissions unit was in operation and a copy of such record;
- b. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such occurrence;
- c. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings exceeded 2.34 pounds per hour, and the actual average VOC emissions for each such day;
- d. each day during which the VOC content of any coating exceeded 0.85 pound per gallon, and the actual VOC content of each such coating employed; and
- e. the permittee shall submit an annual summary of the emissions of VOC from this emissions unit and from emissions units R001, R002, R003, R004, R005 and R006, combined. The reports shall include the emissions calculations, and shall cover the previous calendar year.

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)f based upon the record keeping requirements specified in d)(2).

b. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)d based upon the record keeping requirements specified in d)(2).

c. Emission Limitation:

Each day that photochemically reactive materials are not employed, the VOC emissions from coatings shall not exceed 2.34 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(3)g based upon the record keeping requirements specified in d)(3).

d. Emission Limitation:

The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the values recorded in d)(4)d and d)(4)e based upon the record keeping requirements specified in d)(2), d)(3) and d)(4).

e. Emission Limitation:

The VOC content of coatings shall not exceed 0.85 pound per gallon, 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 formulation data 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.



3. R002, Spray Booth #2

Operations, Property and/or Equipment Description:

Manual coating operation No. 2 to apply water-based paint to wood pieces. Equipment consists of one manual, air assisted, airless gun/pump, booth with dry overspray filters and two associated IR drying ovens. Parts are manual moved.

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. d)(5)

(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 operations(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. 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, b)(2)c and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See b)(2)d and c)(2).

(2) Additional Terms and Conditions

a. Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compounds (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.



The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- b. Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compounds (VOC) emissions from coatings shall not exceed 2.34 pounds per hour.

The requirement to comply with this emission limitation only on days photochemically reactive coating or clean up material are not employed shall cease on the date the U.S. EPA approves revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- c. The VOC content of coatings shall not exceed 0.85 pound per gallon, as applied.
d. The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

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 maximum emissions from coating and cleanup material usage for this emissions unit and for emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons of VOC per rolling, 12-month period.

Compliance with the rolling, 12-month limitations of VOC shall be based upon the rolling, 12-month summations of the emissions of VOC.

Table with 3 columns: Tons VOC emissions current month, +, Previous 11 months tons of VOC, Total 12-month < or = 25.0 tons VOC

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 that photochemically reactive coatings or cleanup material are employed in this emissions unit:
- a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
  - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
  - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

[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 that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
- a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not employed;
  - c. the VOC content of each coating, in lbs/gallon, as applied;
  - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
  - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
  - f. the total number of hours the emissions unit was in operation; and
  - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.

- (4) The permittee shall collect and record the following information for each month for the emissions unit:
- the number of gallons of each nonphotochemically reactive cleanup material employed minus the number of gallons of nonphotochemically reactive cleanup material recovered for disposal;
  - the VOC content of each nonphotochemically reactive cleanup material, in lbs/gallon;
  - the total VOC emissions from all nonphotochemically reactive cleanup materials employed, in lbs/month, i.e., sum of (b) times (a);
  - the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period [i.e., sum of the daily VOC emissions (d)(2)h + d(3)e) and the monthly nonphotochemically reactive cleanup material VOC emission (d)(4)c) for the previous, 12-month period]; and
  - the actual VOC emissions from emissions units R001, R002, R003, R004, R005 and R006, combined, for the previous, 12-month period.
- (5) Modeling to demonstrate compliance with ORC 3704.03(F)(4)(b) ["Review of New Sources of Air Toxics Emissions, Option A."] 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. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install 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 permit to install.
- e) Reporting Requirements
- (1) The permittee submit quarterly deviation (excursion) reports that identify:
- any exceedence of the annual VOC\* emission limitation of 25.0 tons per year, as a rolling, 12-month summation, and the actual VOC emissions during each such period.
- \*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.
- The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions, Section A of this permit.
- (2) 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. any daily record showing that the dry filters were not in service when the emissions unit was in operation and a copy of such record;
- b. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such occurrence;
- c. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings exceeded 2.34 pounds per hour, and the actual average VOC emissions for each such day;
- d. each day during which the VOC content of any coating exceeded 0.85 pound per gallon, and the actual VOC content of each such coating employed; and
- e. the permittee shall submit an annual summary of the emissions of VOC from this emissions unit and from emissions units R001, R002, R003, R004, R005 and R006, combined. The reports shall include the emissions calculations, and shall cover the previous calendar year.

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)f based upon the record keeping requirements specified in d)(2).

b. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)d based upon the record keeping requirements specified in d)(2).

c. Emission Limitation:

Each day that photochemically reactive materials are not employed, the VOC emissions from coatings shall not exceed 2.34 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(3)g based upon the record keeping requirements specified in d)(3).

d. Emission Limitation:

The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the values recorded in d)(4)d and d)(4)e based upon the record keeping requirements specified in d)(2), d)(3) and d)(4).

e. Emission Limitation:

The VOC content of coatings shall not exceed 0.85 pound per gallon, 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 formulation data 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.

**4. R003, Spray Booth #3**

**Operations, Property and/or Equipment Description:**

Manual coating operation No. 3 to apply stain to wood pieces. Equipment consists of multiple manual, air gun/pump (only one used at a time) and booth with dry overspray filters. Parts are manual moved.

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. d)(5), d)(6), d)(7) and e)(2)f

(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 operations(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. 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, b)(2)c and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See b)(2)d and c)(2).

(2) Additional Terms and Conditions

a. Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compounds (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.



The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- b. Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compounds (VOC) emissions from coatings shall not exceed 21.22 pounds per hour.

The requirement to comply with this emission limitation only on days photochemically reactive coating or clean up material are not employed shall cease on the date the U.S. EPA approves revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- c. The VOC content of coatings shall not exceed 6.43 pounds per gallon, as applied.
d. The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

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 maximum emissions from coating and cleanup material usage for this emissions unit and for emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons of VOC per rolling, 12-month period.

Compliance with the rolling, 12-month limitations of VOC shall be based upon the rolling, 12-month summations of the emissions of VOC.

Table with 3 columns: Tons VOC emissions current month, + Previous 11 months tons of VOC, Total 12-month < or = 25.0 tons VOC

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 that photochemically reactive coatings or cleanup material are employed in this emissions unit:
- a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
  - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
  - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

[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 that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
- a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not employed;
  - c. the VOC content of each coating, in lbs/gallon, as applied;
  - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
  - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
  - f. the total number of hours the emissions unit was in operation; and
  - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.

- (4) The permittee shall collect and record the following information for each month for the emissions unit:
- a. the number of gallons of each nonphotochemically reactive cleanup material employed minus the number of gallons of nonphotochemically reactive cleanup material recovered for disposal;
  - b. the VOC content of each nonphotochemically reactive cleanup material, in lbs/gallon;
  - c. the total VOC emissions from all nonphotochemically reactive cleanup materials employed, in lbs/month, i.e., sum of (b) times (a);
  - d. the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period [i.e., sum of the daily VOC emissions (d)(2)h + d(3)e) and the monthly nonphotochemically reactive cleanup material VOC emission (d)(4)c) for the previous, 12-month period]; and
  - e. the actual VOC emissions from emissions units R001, R002, R003, R004, R005 and R006, combined, for the previous, 12-month period.
- (5) The permit to install/operate application for this emissions unit, R003, and R003, R004 and R005, combined 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 emissions unit 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):

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

- 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: toluene

TLV (mg/m<sup>3</sup>): 188.4

Maximum Hourly Emission Rate (lbs/hr): 0.187

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2181

MAGLC (ug/m<sup>3</sup>): 4856

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) R003, R004 and R005, 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 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. the 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.

e) Reporting Requirements

- (1) The permittee submit quarterly deviation (excursion) reports that identify:
- a. any exceedence of the annual VOC\* emission limitation of 25.0 tons per year, as a rolling, 12-month summation, and the actual VOC emissions during each such period.

\*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.

The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions, Section A of this permit.

- (2) 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. any daily record showing that the dry filters were not in service when the emissions unit was in operation and a copy of such record;
  - b. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such occurrence;
  - c. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings exceeded 21.22 pounds per hour, and the actual average VOC emissions for each such day;
  - d. each day during which the VOC content of any coating exceeded 6.43 pounds per gallon, and the actual VOC content of each such coating employed;
  - e. the permittee shall submit an annual summary of the emissions of VOC from this emissions unit and from emissions units R001, R002, R003, R004, R005 and R006, combined. The reports shall include the emissions calculations, and shall cover the previous calendar year; and
  - f. 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 quarterly deviation (excursion) reports. 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.
- f) Testing Requirements
- (1) Compliance with the allowable emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)f based upon the record keeping requirements specified in d)(2).

b. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)d based upon the record keeping requirements specified in d)(2).

c. Emission Limitation:

Each day that photochemically reactive materials are not employed, the VOC emissions from coatings shall not exceed 21.22 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(3)g based upon the record keeping requirements specified in d)(3).

d. Emission Limitation:

The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the values recorded in d)(4)d and d)(4)e based upon the record keeping requirements specified in d)(2), d)(3) and d)(4).

e. Emission Limitation:

The VOC content of coatings shall not exceed 6.43 pounds per gallon, 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 formulation data 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.

**5. R004, Spray Booth #4**

**Operations, Property and/or Equipment Description:**

Manual coating operation No. 4 to apply sealers and topcoats to wood pieces. Equipment consists of one manual, air assisted, airless gun/pump, booth with dry overspray filters and two associated IR drying ovens. Parts are manual moved.

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. d)(5), d)(6), d)(7) and e)(2)f

(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 operations(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. 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, b)(2)c and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See b)(2)d and c)(2).

(2) Additional Terms and Conditions

a. Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compounds (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.



The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- b. Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compounds (VOC) emissions from coatings shall not exceed 15.29 pounds per hour.

The requirement to comply with this emission limitation only on days photochemically reactive coating or clean up material are not employed shall cease on the date the U.S. EPA approves revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- c. The VOC content of coatings shall not exceed 5.56 pounds per gallon, as applied.
d. The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

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 maximum emissions from coating and cleanup material usage for this emissions unit and for emissions units R001, R002, R003, R004, R005, and R006, combined, shall not exceed 25.0 tons of VOC per rolling, 12-month period.

Compliance with the rolling, 12-month limitations of VOC shall be based upon the rolling, 12-month summations of the emissions of VOC.

Table with 3 columns: Tons VOC emissions current month, + Previous 11 months tons of VOC, Total 12-month < or = 25.0 tons VOC

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 that photochemically reactive coatings or cleanup material are employed in this emissions unit:
- a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
  - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
  - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

[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 that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
- a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not employed;
  - c. the VOC content of each coating, in lbs/gallon, as applied;
  - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
  - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
  - f. the total number of hours the emissions unit was in operation; and
  - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.

- (4) The permittee shall collect and record the following information for each month for the emissions unit:
- a. the number of gallons of each nonphotochemically reactive cleanup material employed minus the number of gallons of nonphotochemically reactive cleanup material recovered for disposal;
  - b. the VOC content of each nonphotochemically reactive cleanup material, in lbs/gallon;
  - c. the total VOC emissions from all nonphotochemically reactive cleanup materials employed, in lbs/month, i.e., sum of (b) times (a);
  - d. the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period [i.e., sum of the daily VOC emissions (d)(2)h + d)(3)e) and the monthly nonphotochemically reactive cleanup material VOC emission (d)(4)c) for the previous, 12-month period]; and
  - e. the actual VOC emissions from emissions units R001, R002, R003, R004, R005 and R006, combined, for the previous, 12-month period.
- (5) The permit to install/operate application for this emissions unit, R004, and R003, R004 and R005, combined 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 emissions unit 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: toluene

TLV (mg/m<sup>3</sup>): 188.4

Maximum Hourly Emission Rate (lbs/hr): 0.187

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2181

MAGLC (ug/m<sup>3</sup>): 4856

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) R003, R004 and R005, 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 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. the 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.

e) Reporting Requirements

- (1) The permittee submit quarterly deviation (excursion) reports that identify:
- a. any exceedence of the annual VOC\* emission limitation of 25.0 tons per year, as a rolling, 12-month summation, and the actual VOC emissions during each such period.

\*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.

The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions, Section A of this permit.

- (2) 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. any daily record showing that the dry filters were not in service when the emissions unit was in operation and a copy of such record;
  - b. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such occurrence;
  - c. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings exceeded 15.29 pounds per hour, and the actual average VOC emissions for each such day;
  - d. each day during which the VOC content of any coating exceeded 5.56 pounds per gallon, and the actual VOC content of each such coating employed;
  - e. the permittee shall submit an annual summary of the emissions of VOC from this emissions unit and from emissions units R001, R002, R003, R004, R005 and R006, combined. The reports shall include the emissions calculations, and shall cover the previous calendar year; and
  - f. 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 quarterly deviation (excursion) reports. 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.
- f) Testing Requirements
- (1) Compliance with the allowable emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)f based upon the record keeping requirements specified in d)(2).

b. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)d based upon the record keeping requirements specified in d)(2).

c. Emission Limitation:

Each day that photochemically reactive materials are not employed, the VOC emissions from coatings shall not exceed 15.29 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(3)g based upon the record keeping requirements specified in d)(3).

d. Emission Limitation:

The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the values recorded in d)(4)d and d)(4)e based upon the record keeping requirements specified in d)(2), d)(3) and d)(4).

e. Emission Limitation:

The VOC content of coatings shall not exceed 5.56 pounds per gallon, 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 formulation data 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.

**6. R005, Spray Booth #5**

**Operations, Property and/or Equipment Description:**

Manual coating operation No. 5 to apply water-based paint to wood pieces. Equipment consists of one manual, air assisted, airless gun/pump, booth with dry overspray filters and two associated IR drying ovens. Parts are manual moved.

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. d)(5), d)(6), d)(7) and e)(2)f

(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 operations(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. 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, b)(2)c and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
b.	OAC rule 3745-21-07(G)(2)	See b)(2)a.
c.	OAC rule 3745-31-05(D)	See b)(2)d and c)(2).

(2) Additional Terms and Conditions

a. Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compounds (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.



The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- b. Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compounds (VOC) emissions from coatings shall not exceed 15.29 pounds per hour.

The requirement to comply with this emission limitation only on days photochemically reactive coating or clean up material are not employed shall cease on the date the U.S. EPA approves revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds.

- c. The VOC content of coatings shall not exceed 5.56 pounds per gallon, as applied.
d. The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

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 maximum emissions from coating and cleanup material usage for this emissions unit and for emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons of VOC per rolling, 12-month period.

Compliance with the rolling, 12-month limitations of VOC shall be based upon the rolling, 12-month summations of the emissions of VOC.

Table with 3 columns: Tons VOC emissions current month, +, Previous 11 months tons of VOC, Total 12-month < or = 25.0 tons VOC

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 that photochemically reactive coatings or cleanup material are employed in this emissions unit:
- a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
  - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
  - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

[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 that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
- a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not employed;
  - c. the VOC content of each coating, in lbs/gallon, as applied;
  - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
  - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
  - f. the total number of hours the emissions unit was in operation; and
  - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.

- (4) The permittee shall collect and record the following information for each month for the emissions unit:
- a. the number of gallons of each nonphotochemically reactive cleanup material employed minus the number of gallons of nonphotochemically reactive cleanup material recovered for disposal;
  - b. the VOC content of each nonphotochemically reactive cleanup material, in lbs/gallon;
  - c. the total VOC emissions from all nonphotochemically reactive cleanup materials employed, in lbs/month, i.e., sum of (b) times (a);
  - d. the actual VOC emissions from all coatings and cleanup materials for the previous, 12-month period [i.e., sum of the daily VOC emissions (d)(2)h + d)(3)e) and the monthly nonphotochemically reactive cleanup material VOC emission (d)(4)c) for the previous, 12-month period]; and
  - e. the actual VOC emissions from emissions units R001, R002, R003, R004, R005 and R006, combined, for the previous, 12-month period.
- (5) The permit to install/operate application for this emissions unit, R005, and R003, R004 and R005, combined 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 emissions unit 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: toluene

TLV (mg/m<sup>3</sup>): 188.4

Maximum Hourly Emission Rate (lbs/hr): 0.187

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2181

MAGLC (ug/m<sup>3</sup>): 4856

The permittee, has demonstrated that emissions of toluene, from emissions unit(s) R003, R004 and R005, 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 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. the 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.

e) Reporting Requirements

- (1) The permittee submit quarterly deviation (excursion) reports that identify:
- a. any exceedence of the annual VOC\* emission limitation of 25.0 tons per year, as a rolling, 12-month summation, and the actual VOC emissions during each such period.

\*based upon the premise that 100% of the solvent in the coating and clean up material employed is emitted.

The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Standard Terms and Conditions, Section A of this permit.

- (2) 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 twelve months for each air contaminant source identified in this permit.

The permittee shall identify the following information in the annual permit evaluation report:

- a. any daily record showing that the dry filters were not in service when the emissions unit was in operation and a copy of such record;
  - b. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such occurrence;
  - c. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings exceeded 15.29 pounds per hour, and the actual average VOC emissions for each such day;
  - d. each day during which the VOC content of any coating exceeded 5.56 pounds per gallon, and the actual VOC content of each such coating employed;
  - e. the permittee shall submit an annual summary of the emissions of VOC from this emissions unit and from emissions units R001, R002, R003, R004, R005 and R006, combined. The reports shall include the emissions calculations, and shall cover the previous calendar year; and
  - f. 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 quarterly deviation (excursion) reports. 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.
- f) Testing Requirements
- (1) Compliance with the allowable emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)f based upon the record keeping requirements specified in d)(2).

b. Emission Limitation:

Each day that a photochemically reactive material is employed, the OC emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 40 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(2)d based upon the record keeping requirements specified in d)(2).

c. Emission Limitation:

Each day that photochemically reactive materials are not employed, the VOC emissions from coatings shall not exceed 15.26 pounds per hour.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in d)(3)g based upon the record keeping requirements specified in d)(3).

d. Emission Limitation:

The VOC emissions from all coatings and cleanup materials from this emissions unit, and from emissions units R001, R002, R003, R004, R005 and R006, combined, shall not exceed 25.0 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated by the values recorded in d)(4)d and d)(4)e based upon the record keeping requirements specified in d)(2), d)(3) and d)(4).

e. Emission Limitation:

The VOC content of coatings shall not exceed 5.56 pounds per gallon, 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 formulation data 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.