



Environmental Protection Agency

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

8/29/2011

Jay Vannatter  
Ariel's Oak Inc.  
9510 Cutler Rd. NE  
Sherrodsville, OH 44675

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

Facility ID: 0679000295  
Permit Number: P0107854  
Permit Type: OAC Chapter 3745-31 Modification  
County: Tuscarawas

Certified Mail

Yes	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
Yes	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

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

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

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

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 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-SEDO





## Response to Comments

Facility ID:	0679000295
Facility Name:	Ariel's Oak Inc.
Facility Description:	Wood furniture finishing
Facility Address:	9486 Cutler Rd. NE Sherrodsville, OH 44675 Tuscarawas County
Permit:	P0107854, Permit-To-Install and Operate - OAC Chapter 3745-31 Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Times-Reporter on 07/23/2011. The comment period ended on 08/22/2011.	
Hearing date (if held)	<b>None</b>
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

### 1. No comments received





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Ariel's Oak Inc.**

Facility ID:	0679000295
Permit Number:	P0107854
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	8/29/2011
Effective:	8/29/2011
Expiration:	8/29/2016





Division of Air Pollution Control
Permit-to-Install and Operate
for
Ariel's Oak Inc.

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? ..... 4
3. What records must I keep under this permit? ..... 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
7. What reports must I submit under this permit? ..... 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? ..... 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
15. What happens if a portion of this permit is determined to be invalid? ..... 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions ..... 10
1. R001, Spray Booth # 1..... 11
2. R002, Spray Booth # 2..... 21



## Authorization

Facility ID: 0679000295  
Application Number(s): A0041563  
Permit Number: P0107854  
Permit Description: Chapter 31 modification for increases in coating usage, VOC and HAP contents of coatings used, and to include federally enforceable restrictions on facility-wide VOC emissions to avoid Title V requirements for two spray booths; renewal of operating permits  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$400.00  
Issue Date: 8/29/2011  
Effective Date: 8/29/2011  
Expiration Date: 8/29/2016  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Ariel's Oak Inc.  
9486 Cutler Rd. NE  
Sherrodsville, OH 44675

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

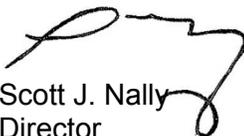
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0107854  
Permit Description: Chapter 31 modification for increases in coating usage, VOC and HAP contents of coatings used, and to include federally enforceable restrictions on facility-wide VOC emissions to avoid Title V requirements for two spray booths; renewal of operating permits

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

<b>Emissions Unit ID:</b>	<b>R001</b>
Company Equipment ID:	Spray Booth # 1
Superseded Permit Number:	06-6023
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R002</b>
Company Equipment ID:	Spray Booth # 2
Superseded Permit Number:	06-6023
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, Southeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

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

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

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

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



1. R001, Spray Booth # 1

Operations, Property and/or Equipment Description:

Global Finishing Solutions IDB-108 spray booth controlled with exhaust filters and used to apply stains and dyesto wood furniture with a Kremlin S2 HVLP spray gun; Chapter 31 modification to allow increasedcoatings usage and the VOC and HAP contents of coatings used and to include federally enforceable restrictions on facility-wide VOC emissions to avoid Title V requirements; supersedes PTI #06-06023 issued on December 15, 1999

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

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

a. d)(8) – (11) and e)(3)

(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. b)(1)d., c)(1), d)(2),e)(4)c. and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 24.4 tons per rolling, 12-month period.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 0.01 pound per hour and 0.03 ton per year.  No visible PE from the stack serving this emissions unit.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C).  See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-31-05(D) (Synthetic minor restriction to avoid Title V requirements, BAT requirements in OAC rule 3745-21-15)	VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period.  See b)(2)c. and c)(1) below.
e.	OAC rule 3745-21-07(G)	Organic compound (OC) emissions from all coatings and cleanup materials shall not exceed 8 pounds per hour and 40 pounds per day.  See b)(2)d. below.
f.	OAC rule 3745-17-11(C)	See c)(2) and (3) below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the uncontrolled potential to emit for PE is less than 10 tons/yr.

c. Potential VOC emissions from de minimis and exempt sources are less than 0.5 ton per year.

d. This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when a photochemically reactive material, as defined in OAC 3745-21-01(C)(5), is employed.

The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive 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. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(1), e)(4)a. and b. and f)(1)d. shall be void.

c) Operational Restrictions

- (1) The maximum material usage for emissions units R001 and R002, combined, shall not cause VOC emissions to exceed 24.4 tons as a rolling, 12-month summation based on the following equations:

a.

$$X = \frac{\sum_{i=1}^n (G)(VOC)}{2,000 \text{ lbs per ton}}$$

where:

X= tons of VOC emissions per month for emissions units R001 and R002, combined;

G= monthly usage of each coating and cleanup material, in gallons;

VOC= VOC content of each coating and cleanup material, in pounds of VOC per gallon;

n = total number of coatings; and

b.

$$\sum_{i=1}^n (X) \text{ is } \leq 24.4 \text{ tons VOC, as a rolling 12-month summation}$$

where:

n = months in the rolling, 12-month period.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit.

- (2) The permittee shall install and operate a dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

## d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day when photochemically reactive materials are employed in this emissions unit:
  - a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and 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 cleanup material, in pounds OC per gallon;
  - d. the total OC emissions from all coatings and cleanup materials, in pounds per day;
  - e. the total number of hours this emissions unit is in operation; and,
  - f. the average hourly OC emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

[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).]

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, d)(1) will be voided entirely.]

- (2) The permittee shall collect and record the following information each month for all coatings and cleanup materials employed in emissions units R001 and R002, combined:
  - a. the company identification for each coating and cleanup material employed;
  - b. the number of gallons of each coating and cleanup material employed minus the number of gallons of each coating and cleanup material recovered for disposal;
  - c. the VOC content of each coating and cleanup material, in pounds per gallon;
  - d. the total VOC emissions from all coatings and cleanup materials employed [the sum of (b. times c.) for all coatings plus (b. times c.) for all cleanup materials] divided by 2,000, in tons; and,
  - e. the rolling, 12-month summation of the total VOC emissions from emissions units R001 and R002, combined, i.e., the summation of the total VOC emissions, as recorded in d. above, for the present month plus the previous 11 months of operation, in ton(s).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be

maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (4) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (6) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (7) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (8) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units, R001 and R002, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
  - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic

compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" 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 (xylene, Stoddard solvent)

TLV (mg/m<sup>3</sup>): 75.36(toluene)

Maximum Hourly Emission Rate (lbs/hr): 1.43(toluene)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 108.05

MAGLC (ug/m<sup>3</sup>): 1,794.33

The permittee has demonstrated that emissions of toluene from emissions units R001 and R002 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).

- (9) 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 FEPTIO 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.

- (10) 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.

- (11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (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 permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day;
  - b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day;
  - c. all deviations (excursions) of the following emission limitations and operational restrictions that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period;
  - d. the probable cause of each deviation (excursion);
  - e. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and



f. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

f) Testing Requirements

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

a. Emissions Limitations:  
PE shall not exceed 0.01pound per hour and 0.03 ton per year.

Applicable Compliance Method:

Compliance with the emissions limitations shall be demonstrated by the following one-time calculations based on a maximum dye/stain use rate of 2.5 gallons per hour, a maximum dye/stain solids content of 1.50 pounds per gallon, a transfer efficiency of 50%, a capture efficiency of 100%, a control efficiency of 99.3%, and a maximum of 4,380 annual hours of operation per year:

$$\begin{aligned}
 \text{PE (lb/hr)} &= \text{gallons per hour coating use} \times \text{maximum solids content of dye/stain} \times \text{transfer efficiency} \times \text{capture efficiency} \times \text{control efficiency} \\
 &= 2.5 \text{ gallons/hr} \times 1.50 \text{ pounds/gallon} \times (1-0.50) \times 100\% \times (1-0.993) \\
 &= 0.01 \text{ pound per hour}
 \end{aligned}$$

If required, hourly particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

$$\begin{aligned}
 \text{PE (tons/yr)} &= 0.01 \text{ pound per hour} \times 4,380 \text{ hours/yr} \times 1 \text{ ton}/2,000 \text{ pounds} \\
 &= 0.03 \text{ ton per year}
 \end{aligned}$$

b. Emissions Limitation:  
No visible PE from the stack serving this emissions unit.

Applicable Compliance Method:

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

- c. Emissions Limitation:  
VOC emissions shall not exceed 24.4 tons per rolling, 12-month period.  
VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emissions limitation shall be demonstrated by the recordkeeping in d)(2)e.

- d. Emissions Limitations:  
OC emissions from all coatings and cleanup materials shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance with the emissions limitation shall be demonstrated by the recordkeeping in d)(1)d. and f.

- (2) Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.

g) Miscellaneous Requirements

- (1) None.



2. R002, Spray Booth # 2

Operations, Property and/or Equipment Description:

Global Finishing Solutions IDB-108 spray booth controlled with exhaust filters and used to apply sealer and topcoat to wood furniture with a CA Technologies Model Cougar air-assisted airless spray gun; Chapter 31 modification to allow increased coatings usage and increases in VOC and HAP contents of coatings used and to include federally enforceable restrictions on facility-wide VOC emissions to avoid Title V requirements; supersedes PTI #06-06023 issued on December 15, 1999

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

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

a. d)(8) – (11) and e)(3)

(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. b)(1)d., c)(1), d)(2), e)(4)c. and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 24.4 tons per rolling, 12-month period.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 0.04pound per hour and 0.18 ton per year.  No visible PE from the stack serving this emissions unit.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C).  See b)(2)a. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(E), as effective 12/01/06 (Voluntary restriction to avoid BAT requirements for PE)	See b)(2)b. below.
d.	OAC rule 3745-31-05(D) (Synthetic minor restriction to avoid Title V requirements, BAT requirements in OAC rule 3745-21-15)	VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period.  See b)(2)c. and c)(1) below.
e.	OAC rule 3745-21-07(G)	Organic compound (OC) emissions from all coatings and cleanup materials shall not exceed 8 pounds per hour and 40 pounds per day.  See b)(2)c. below.
f.	OAC rule 3745-17-11(C)	See c)(2) and (3) below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best available Technology (BAT) requirements pursuant to OAC rule 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 regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit to Install and Operate P0107747 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. Use of spray equipment with a 25% transfer efficiency;
- ii. Controlled with a partial enclosure with a 100% capture efficiency and dry filters with a 99.3% control efficiency (overall control of 99.3%) installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s); and

- iii. PE shall not exceed 0.18 ton per year.
- c. Potential VOC emissions from de minimis and exempt sources are less than 0.5 ton per year.
- d. This emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when a photochemically reactive material, as defined in OAC 3745-21-01 (C)(5), is employed.

The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive 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. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(1), e)(4)a. and b. and f)(1)d. shall be void.

c) Operational Restrictions

- (1) The maximum material usage for emissions units R001 and R002, combined, shall not cause VOC emissions to exceed 24.4 tons as a rolling, 12-month summation based on the following equations:

a.

$$X = \sum_{i=1}^n (G)(VOC) / 2,000 \text{ lbs per ton}$$

where:

X= tons of VOC emissions per month for emissions units R001 and R002, combined;

G= monthly usage of each coating and cleanup material, in gallons;

VOC= VOC content of each coating and cleanup material, in pounds of VOC per gallon;

n = total number of coatings; and

b.

$$\sum_{i=1}^n (X) \text{ is } \leq 24.4 \text{ tons VOC, as a rolling 12-month summation}$$

where:

n = months in the rolling, 12-month period.

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the organic solvent usage, upon issuance of this permit.

- (2) The permittee shall install and operate a dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (3) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information for each day when photochemically reactive materials are employed in this emissions unit:
- the company identification for each coating and cleanup material employed;
  - the number of gallons of each coating and cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
  - the OC content of each coating and cleanup material, in pounds OC per gallon;
  - the total OC emissions from all coatings and cleanup materials, in pounds per day;
  - the total number of hours this emissions unit is in operation; and,
  - the average hourly OC emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).
- [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).]
- [Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, d)(1) will be voided entirely.]
- (2) The permittee shall collect and record the following information each month for all coatings and cleanup materials employed in emissions units R001 and R002, combined:
- the company identification for each coating and cleanup material employed;
  - the number of gallons of each coating and cleanup material employed minus the number of gallons of each coating and cleanup material recovered for disposal;
  - the VOC content of each coating and cleanup material, in pounds per gallon; and
  - the total VOC emissions from all coatings and cleanup materials employed [the sum of (b. times c.) for all coatings plus (b. times c.) for all cleanup materials] divided by 2,000, in tons; and,

- e. the rolling, 12-month summation of the total VOC emissions from emissions units R001 and R002, combined, i.e., the summation of the total VOC emissions, as recorded in d. above, for the present month plus the previous 11 months of operation, in ton(s).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

- (3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (4) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (6) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (7) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.
- (8) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units, R001 and R002, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to

this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" 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 (xylene, Stoddard solvent)

TLV (mg/m<sup>3</sup>): 75,361.96(toluene)

Maximum Hourly Emission Rate (lbs/hr): 1.43(toluene)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 108.05

MAGLC (ug/m<sup>3</sup>): 1,794.33

The permittee has demonstrated that emissions of toluene from emissions units R001 and R002 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).

- (9) 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 FEPTIO 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.

- (10) 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.
  - (11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.
- e) Reporting Requirements
  - (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
  - (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 permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
  - (3) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
  - (4) The permittee shall submit quarterly deviation (excursion) reports that identify:
    - a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day;
    - b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day;



- c. all deviations (excursions) of the following emission limitations and operational restrictions that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
  - i. VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period;
- d. the probable cause of each deviation (excursion);
- e. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- f. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

f) Testing Requirements

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

- a. Emissions Limitations:  
PE shall not exceed 0.04pound per hour and 0.18 ton per year.

Applicable Compliance Method:

Compliance with the emissions limitations shall be demonstrated by the following one-time calculations based on a maximum combined sealer and topcoat use rate of 2.5 gallons per hour, a maximum sealer and topcoat solids content of 3.25 pounds per gallon, a transfer efficiency of 25%, a capture efficiency of 100% and a control efficiency of 99.3%:

$$\begin{aligned}
 \text{PE (lb/hr)} &= \text{gallons per hour coating use} \times \text{maximum solids content of sealer and topcoat} \times \text{transfer efficiency} \times \text{capture efficiency} \times \text{control efficiency} \\
 &= 2.5 \text{ gallons/hr} \times 3.25 \text{ pounds/gallon} \times (1-0.25) \times 100\% \times (1-0.993) \\
 &= 0.04 \text{ pound per hour}
 \end{aligned}$$

If required, hourly particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources", and the procedures specified in OAC rule 3745 17 03(B)(10). Alternative U.S. EPA-approved test

methods may be used with prior approval from Ohio EPA, Southeast District Office.

$$\begin{aligned} \text{PE (tons/yr)} &= 0.04 \text{ pound per hour} \times 8,760 \text{ hours/yr} \times 1 \text{ ton}/2,000 \text{ pounds} \\ &= 0.18 \text{ ton per year} \end{aligned}$$

- b. Emissions Limitation:  
No visible PE from the stack serving this emissions unit.

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

- c. Emissions Limitation:  
VOC emissions shall not exceed 24.4 tons per rolling, 12-month period.  
VOC emissions from emissions units R001 and R002, combined, shall be less than 24.4 tons per rolling, 12-month period.

Applicable Compliance Method:  
Compliance with the emissions limitation shall be demonstrated by the recordkeeping in d)(2)e.

- d. Emissions Limitations:  
OC emissions from all coatings and cleanup materials shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:  
Compliance with the emissions limitation shall be demonstrated by the recordkeeping in d)(1)d. and f.

- (2) Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.

g) Miscellaneous Requirements

- (1) None.