



Environmental Protection Agency

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

7/18/2011

Peg Whitehurst
Norwalk Custom Order Furniture
100 Furniture Pkwy.
Norwalk, OH 44857

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0339020083
Permit Number: P0087252
Permit Type: Renewal
County: Huron

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
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 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, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Norwalk Custom Order Furniture**

Facility ID:	0339020083
Permit Number:	P0087252
Permit Type:	Renewal
Issued:	7/18/2011
Effective:	7/18/2011
Expiration:	7/18/2016



Division of Air Pollution Control
Permit-to-Install and Operate
for
Norwalk Custom Order Furniture

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Authorization

Facility ID: 0339020083
Application Number(s): A0018183
Permit Number: P0087252
Permit Description: Renewal FEPTIO for four stain & varnish spray booths (R001 - R004) and ten polyurethane glue booths (K001-K010).
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/18/2011
Effective Date: 7/18/2011
Expiration Date: 7/18/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Norwalk Custom Order Furniture
RTE 18 & 20 BYPASS
Norwalk, OH 44857

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

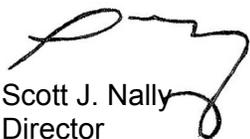
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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: P0087252

Permit Description: Renewal FEPTIO for four stain & varnish spray booths (R001 - R004) and ten polyurethane glue booths (K001-K010).

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

Emissions Unit ID:	R004
Company Equipment ID:	Stain and varnish spray booth #4
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable

Group Name: Group 1 (K sources)

Emissions Unit ID:	K001
Company Equipment ID:	Polyurethane Glue Booth #1 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K002
Company Equipment ID:	Polyurethane Glue Booth #2 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K003
Company Equipment ID:	Polyurethane Glue Booth #3 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K004
Company Equipment ID:	Polyurethane Glue Booth #4 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K005
Company Equipment ID:	Polyurethane Glue Booth #5 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K006
Company Equipment ID:	Polyurethane Glue Booth #6 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K007
Company Equipment ID:	Polyurethane Glue Booth #7 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K008
Company Equipment ID:	Polyurethane Glue Booth #8 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	K009
Company Equipment ID:	Polyurethane Glue Booth #9 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category and Type:	Not Applicable

Emissions Unit ID:	K010
Company Equipment ID:	Polyurethane Glue Booth #10 w/dry filtration
Superseded Permit Number:	03-13929
General Permit Category andType:	Not Applicable

Group Name: Group 2

Emissions Unit ID:	R001
Company Equipment ID:	Stain and varnish spray booth #1
Superseded Permit Number:	03-17021
General Permit Category andType:	Not Applicable
Emissions Unit ID:	R002
Company Equipment ID:	Stain and varnish spray booth #2
Superseded Permit Number:	03-17021
General Permit Category andType:	Not Applicable
Emissions Unit ID:	R003
Company Equipment ID:	Stain and varnish spray booth #3
Superseded Permit Number:	03-17021
General Permit Category andType:	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, Northwest District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

Final Permit-to-Install and Operate

Norwalk Custom Order Furniture

Permit Number: P0087252

Facility ID: 0339020083

Effective Date: 7/18/2011

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. R004, Stain and varnish spray booth #4

Operations, Property and/or Equipment Description:

Stain and Varnish Spray Booth (Booth 4)

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. b)(1)e., d)(4) through d)(7) 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)a., b)(2)a., d)(3), e)(1) 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.	OAC rule 3745-31-05(D)	<u>From emissions units R001 through R004 and K002 through K010, combined:</u> Hazardous air pollutant (HAP)* emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions shall not exceed 7.30 tons per year. See b)(2)b.
c.	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 pounds per hour and 40 pounds per day. See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(C)	See c)(1) and c)(2).
e.	OAC rule 3745-114-01 ORC rule 3704.03(F)	See d)(4) through d)(7) and e)(3).

(2) Additional Terms and Conditions

- a. HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions, from emissions units R001 through R004 and K002 through K010, combined. 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 emissions, upon issuance of this permit.
- b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-07(G)(2).
- c. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)c., d)(1), e)(1)b.

c) Operational Restrictions

- (1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever these emissions units are 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.
- (2) 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 each day for emissions units R004:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed;

- c. the OC content of each coating employed, in pounds per gallon, as applied;
- d. the OC emissions from each coating material employed, in pounds [summation d)(1)b. x d)(1)e.] for each coating employed;
- e. the total OC emissions from all coatings employed, in pounds per day [summation of d)(1)f.];
- f. the total number of hours the emissions unit was in operation; and
- g. the average hourly OC emission rate for all coatings, in pounds per hour, average [d)(1)e. divided by d)(1)f.].

Note: The information required above must be recorded for the materials as applied, including any thinning solvents added at the emissions unit.

- (2) The permittee shall calculate and record the following information each month:
 - a. the total OC emissions from all coatings employed, in pounds per month; and
 - b. the annual year-to-date OC emissions, in tons [summation of d)(2)a. for each calendar month to date from January to December].
- (3) The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K001 through K010 and R001 through R004 combined:
 - a. the company identification of each coating and cleanup material employed;
 - b. the pounds per gallon of each HAP in each coating and cleanup material; as applied;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings and cleanup materials employed, [summation of each HAP emission rate [d)(3)b. x d)(3)c. for each individual coating and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, and cleanup materials employed, [summation of d)(3)d. for all HAPs], in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
- (4) The permit-to-install and operate (PTIO) application for this emissions unit, was evaluated based on the actual materials and the design parameters of the emissions unit'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 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 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 emitted from the emissions unit, (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, 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:
 - i. Pollutant: toluene
TLV (mg/m³): 188.40
Maximum hourly Emission Rate (lbs/hr): 35.84 (assume total emissions from all units are toluene)
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 3,108.00
MAGLC (ug/m³): 4,485.71

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

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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.

- (6) 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);

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- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit 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 or the materials applied.
- (7) 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.
- (8) 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.
- (9) 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.
- (10) 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.
- (11) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
 - a. The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
 - b. the date of the inspection;
 - c. a description of each/any problem identified and the date it was corrected;
 - d. a description of any maintenance and repairs performed; and
 - e. 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.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. any exceedance of the 12-month rolling HAP emission limitations.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. 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).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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, or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

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

a. Emission Limitation:

OC emissions shall not exceed 7.30 tpy.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(2) of this permit.

b. Emission Limitation:

OC emissions shall not exceed 8 pounds per hour and 40 pounds per day.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in section d)(1) of this permit.

c. Emission Limitation:

From emissions units R001 through R004 and K002 through K010, combined, HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(3) of this permit.

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group - Group 1 (K sources): K001, K002, K003, K004, K005, K006, K007, K008, K009, K010:

EU ID	Operations, Property and/or Equipment Description
K001	Polyurethane Glue Booth (Booth 1)
K002	Polyurethane Glue Booth (Booth 2)
K003	Polyurethane Glue Booth (Booth 3)
K004	Polyurethane Glue Booth (Booth 4)
K005	Polyurethane Glue Booth (Booth 5)
K006	Polyurethane Glue Booth (Booth 6)
K007	Polyurethane Glue Booth (Booth 7)
K008	Polyurethane Glue Booth (Booth 8)
K009	Polyurethane Glue Booth (Booth 9)
K010	Polyurethane Glue Booth (Booth 10)

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

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

a. b)(1)e., d)(3) through d)(6) 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)a., b)(2)a., d)(2), e)(1) 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.	OAC rule 3745-31-05(D)	<u>From emissions units R001 through R004 and K002 through K010, combined:</u> Hazardous air pollutant (HAP)* emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	<u>From each emissions unit individually:</u> Organic compound (OC) emissions shall not exceed 0.32 pound per hour and 1.40 tons per year. See b)(2)b. and b)(2)c.
c.	OAC rule 3745-21-07(G)(2)	See b)(2)d.
d.	OAC rule 3745-17-11(C)	See c)(1) and c)(2).
e.	OAC rule 3745-114-01 ORC rule 3704.03(F)	See d)(3) through d)(6) and e)(3).

(2) Additional Terms and Conditions

- a. HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions, from emissions units R001 through R004 and K002 through K010, combined. These emissions units have 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 emissions, upon issuance of this permit.
- b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-07(G).
- c. The hourly emission limitation represents the potential to emit* of the emissions units. Therefore, no recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit is based on a worst-case operation involving a maximum coating usage rate of 0.25 gallons per hour and a maximum OC content of 1.29 pounds per gallon.
- d. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to

comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)c., d)(1)b., c)(3), e)(4)

c) Operational Restrictions

- (1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever these emissions units are 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.
- (2) 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.
- (3) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in these emission units is prohibited.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for the coating lines, individually:
 - a. the name and identification number of each adhesive employed;
 - b. documentation on whether or not each adhesive is a photochemically reactive material;
 - c. the OC content of each adhesive, as applied, in pounds per gallon;
 - d. the number of gallons of each adhesive employed;
 - e. the OC emission rate for each adhesive [summation of d)(1)c. x d)(1)d.];
 - f. the total OC emission rate for all adhesives [summation of d)(1)e., in pounds or tons; and
 - g. the annual year to date OC emissions from adhesive usage, in tons per year [summation of d)(1)f. of this permit for each calendar month to date from January to December].
- (2) The permittee shall collect and record the following information for HAP emissions each month for emissions units R001 through R003 and K001 through K010, combined:
 - a. the company identification of each adhesive employed;
 - b. the amount of each individual HAP (lb/gallon) in each adhesive, as applied;

- c. the number of gallons of each adhesive employed;
- d. the emission rate for each individual HAP from each adhesive employed [summation of d)(2)b. x d)(2)c.] for each individual HAP, in lbs/month;
- e. the total emission rate for each individual HAP from all adhesives employed [summation of d)(2)d. for each individual HAP], in lbs/month;
- f. the total HAP emission rate for all HAPs combined from all adhesives employed [summation of d)(2)e. for all HAPs], in lbs/month; and
- g. the annual emissions of each individual HAP and all HAPs combined, based upon a rolling 12-month summation of the monthly HAP emissions.

Note: The adhesive information required above must be recorded for the materials as applied, including any thinning solvents added at the emissions unit.

- (3) The permit-to-install and operate (PTIO) application for these emissions units, were evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units 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 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 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 emitted from the emissions unit, (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, 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):

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

- 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:

- i. Pollutant: toluene

TLV (mg/m³): 188.40

Maximum hourly Emission Rate (lbs/hr): 35.84 (assume total emissions from all units are toluene)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 3,108.00

MAGLC (ug/m³): 4,485.71

The permittee, has demonstrated that emissions of toluene from these emissions units, are 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).

- (4) Prior to making any physical changes to or changes in the method of operation of these emissions units, 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.

- (5) 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 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 units or the materials applied.
- (6) 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.
- (7) 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.
- (8) 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.

- (9) 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.
- (10) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
 - a. the permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
 - b. the date of the inspection;
 - c. a description of each/any problem identified and the date it was corrected;
 - d. a description of any maintenance and repairs performed; and
 - e. 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.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. any exceedance of the 12-month rolling HAP emission limitations.
 - b. the probable cause of each deviation (excursion);

- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. 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).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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, or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) The permittee shall notify the Northwest District Office in writing of any monthly record showing the use of a photochemically reactive material. The notification shall include a copy of such record and shall be sent to the Northwest District Office within 30 days following the end of the calendar month.

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.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
From each emissions unit individually, OC emissions shall not exceed 0.32 pound per hour.

Applicable Compliance Method:

The hourly OC emission limitation is based on the emission's unit's potential to emit*. Therefore, no hourly recordkeeping, reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit for these emissions units, individually, is based on a maximum OC content of 1.29 pounds per gallon and a maximum usage rate of 0.25 gallons per hour.

b. Emission Limitation:

From each emissions unit individually, OC emissions shall not exceed 1.40 tons per year.

Applicable Compliance Method:

Compliance with the annual emission limitation shall be based upon the recordkeeping requirements specified in d)(1) of this permit.

c. Emission Limitation:

From emissions units R001 through R004 and K002 through K010, combined, HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions.

Applicable Compliance Method:

Compliance with the above emissions limitations shall be based upon recordkeeping requirements specified in d)(2) of this permit.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group -Group 2: R001,R002,R003,

EU ID	Operations, Property and/or Equipment Description
R001	Stain and Varnish Spray Booth 1
R002	Stain and Varnish Spray Booth 2
R003	Stain and Varnish Spray Booth 3

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

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

a. b)(1)e., d)(4) through d)(7) 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)a., b)(2)a., b)(2)b., c)(1), c)(2)., d)(1), d)(3), e(1), f)(1)c. through f)(1)f.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	<p><u>From emissions units R001 through R003, combined:</u></p> <p>Organic compound (OC) emissions shall not exceed 33.08 tons per year, based upon a rolling 12-month summation of monthly OC emissions from the coating operations.</p> <p>See b)(2)a., c)(1) and c)(2).</p> <p><u>From emissions units R001 through R004 and K002 through K010, combined:</u></p> <p>Hazardous air pollutant (HAP)* emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for</p>

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions. See b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	<u>From each emission unit individually:</u> OC emissions shall not exceed 5.63 pounds per hour from the coating operations. <u>From emissions units R001 through R003, combined:</u> OC emissions shall not exceed 3,006.7 pounds per month and 18.04 tons per year. See b)(2)c. and b)(2)d.
c.	OAC rule 3745-21-07(G)(2)	See b)(2)e.
d.	OAC rule 3745-17-11(C)	See c)(3) and c)(4).
e.	OAC rule 3745-114-01 ORC rule 3704.03(F)	See d)(4) through d)(7) and e)(3).

*Hazardous Air Pollutant (HAP) means any air pollutant listed in or pursuant to Section 112 (b) of the Clean Air Act.

(2) Additional Terms and Conditions

- a. OC emissions, from emissions units R001 through R003, combined, shall not exceed 33.08 tons per year, based upon a rolling 12-month summation of monthly OC emissions from the coating operations based on the coating usage restrictions [see c)(1) and c)(2)]. For purposes of federal enforceability, emission limitations of OC effectively restrict volatile organic compound (VOC) emissions. Federally enforceable OC limitations are being established for purposes of limiting potential to emit. These emissions units have 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 emissions, upon issuance of this permit.
- b. HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions, from emissions units R001 through R004 and K002 through K010, combined. These emissions unit have 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 emissions, upon issuance of this permit.

- c. The hourly emission limitation represents the potential to emit* of the emissions units. Therefore, no recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit is based on a worst-case coating operation involving a maximum coating usage rate of 0.86 gallons per hour and a maximum OC content of 6.55 lbs per gallon.

- d. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).
- e. On February 18, 2008, OAC rule 3745-21-07 was revised in its entirety; therefore, the 21-07 rule that was in effect prior to this date is no longer part of the State regulations. On April 4, 2008, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-07, the requirement to comply with the previous 21-07 rule provisions still exists as part of the federally-approved SIP for Ohio. The following terms and conditions shall become void after U.S. EPA approves the rule revision:

b)(1)c., c)(5), d)(1)d., d)(2)b., e)(4)

c) Operational Restrictions

- (1) The maximum annual coating usage for emissions units R001 through R003 combined shall not exceed 10,100 gallons per year, based upon a rolling, 12-month summation of the coating usage. These emissions units have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of coating usage, upon issuance of this permit.
- (2) The OC content for all coatings employed in these emissions units shall not exceed 6.55 lbs/gallon, as applied.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever these emissions units are 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.
- (4) 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.
- (5) The use of photochemically reactive materials, as defined in OAC rule 3745-21-01, in these emission units is prohibited.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for all coatings employed in emissions units R001 through R003 combined:

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- a. the name and identification number of each coating employed;
- b. the volume, in gallons, of each coating employed;
- c. the total volume, in gallons, of all coatings employed [summation of d)(1)b.];
- d. documentation of whether or not each coating material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01;
- e. the OC content of each coating employed, in pounds per gallon, as applied;
- f. the OC emissions from each coating material employed, in pounds [summation d)(1)b. x d)(1)e.] for each coating employed;
- g. the total OC emissions from all coatings employed, in pounds [summation of d)(1)f.];
- h. the rolling 12-month summation of the emission rate for OC, in tons; and
- i. the rolling, 12-month summation of the coating usage, in gallons.

Note: The information required above must be recorded for the materials as applied, including any thinning solvents added at the emissions unit.

- (2) The permittee shall collect and record the following each month for cleanup operations from emissions units R001 through R003 combined:
 - a. the name and identification of each cleanup material employed;
 - b. documentation of whether or not each cleanup material is employed is a photochemically reactive material, as defined in OAC rule 3745-21-01;
 - c. the OC content of each cleanup material employed, in pounds per gallon;
 - d. the number of gallons of each cleanup material employed;
 - e. the OC emissions from each cleanup material employed, [summation of d)(2)c. x d)(2)d.],
 - f. the total OC emissions from all cleanup materials employed, [summation of d)(2)e.], in pounds; and
 - g. the annual year to date OC emissions from cleanup operations, in tons per year, [summation of d)(2)f.]
- (3) The permittee shall collect and record the following information regarding HAP emissions each month for emissions units K001 through K012 and R001 through R004 combined:
 - a. the company identification of each coating and cleanup material employed;

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- b. the pounds per gallon of each HAP in each coating and cleanup material; as applied;
 - c. the number of gallons of each coating and cleanup material employed;
 - d. the total emission rate for each HAP from all coatings and cleanup materials employed, [summation of each HAP emission rate [d)(3)b. x d)(3)c. for each individual coating and cleanup material], in lbs/month;
 - e. the total HAP emission rate for the combination of all HAPs from all coatings, and cleanup materials employed, [summation of d)(3)d. for all HAPs], in lbs/month; and
 - f. the annual emissions of each HAP and the combination of all HAPs, based upon a rolling 12-month summation.
- (4) The permit-to-install and operate (PTIO) application for these emissions units, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units 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 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 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 emitted from the emissions unit, (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, 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):

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

- 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:

- i. Pollutant: 2-butoxy ethanol

TLV (mg/m³): 96.66

Maximum hourly Emission Rate (lbs/hr): 0.96

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 262

MAGLC (ug/m³): 2,301

- ii. Pollutant: 2-methyl 1-propanol

TLV (mg/m³): 151.575

Maximum hourly Emission Rate (lbs/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 319.18

MAGLC (ug/m³): 3,609

- iii. Pollutant: diacetone alcohol

TLV (mg/m³): 188.405

Maximum hourly Emission Rate (lbs/hr): 3.12

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 851.14

MAGLC (ug/m³): 4,486

- iv. Pollutant: toluene

TLV (mg/m³): 188.405

Maximum hourly Emission Rate (lbs/hr): 2.36

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 643.22

MAGLC (ug/m³): 4,486

v. Pollutant: methanol

TLV (mg/m³): 262.086

Maximum hourly Emission Rate (lbs/hr): 16.89

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 4,607.6

MAGLC (ug/m³): 6,240

The permittee, has demonstrated that emissions of 2-butoxy ethanol, 2-methyl 1-propanol, diacetone alcohol, toluene, and methanol from emissions units R001 through R003, 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).

- (5) Prior to making any physical changes to or changes in the method of operation of the emissions unit, 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.

- (6) 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 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 or the materials applied.
- (7) 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.
- (8) 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.
- (9) 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.
- (10) 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.

- (11) 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.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations 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. any exceedance of the 12-month rolling HAP emission limitations;
 - ii. any exceedance of the 12-month rolling OC emission limitation for coating operations;
 - iii. any exceedance of the 12-month rolling coating usage restriction; and
 - iv. any exceedance of the OC content restriction.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. 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).

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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, or the exhaust stack have been made, then the report shall include a statement to this effect.
- (4) The permittee shall notify the Northwest District Office in writing of any monthly record showing the use of a photochemically reactive material. The notification shall include a copy of such record and shall be sent to the Northwest District Office within 30 days following the end of the calendar month.
- (5) The permittee shall also submit annual reports that specify the total organic compound emissions, in tons from the clean-up operations in these emissions units for the previous calendar year. These reports shall be submitted by January 31 of each year.
- (6) 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.

f) **Testing Requirements**

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

a. Emission Limitation:

From each emission unit individually, OC emissions shall not exceed 5.63 pounds per hour from the coating operations.

Applicable Compliance Method:

The hourly emission limitation represents the potential to emit* of the emissions unit. Therefore, no recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limitation.

*The potential to emit is based on a worst-case operation involving a maximum coating usage rate of 0.86 gallons per hour and a maximum OC content of 6.55 pounds per gallon.

b. Emission Limitation:

From emissions units R001 through R003, combined, OC emissions shall not exceed 3,006.7 pounds per month and 18.04 tons per year.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(2) of this permit.

c. Emission Limitation:

From emissions units R001 through R003, combined, OC emissions shall not exceed 33.08 tons per year, based upon a rolling 12-month summation of monthly OC emissions from the coating operations.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(1) of this permit

d. Emission Limitation:

From emissions units R001 through R004 and K002 through K010, combined, HAP emissions shall not exceed 9.9 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, based upon a rolling 12-month summation of monthly HAP emissions.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(3) of this permit.

e. Emission Limitation:

The maximum annual coating usage for emissions units R001 through R003 shall not exceed 10,100 gallons per year, based on a rolling, 12-month summation of the coating usage.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in d)(1) of this permit.

f. Emission Limitation:

The OC content for all coatings employed in these emissions units shall not exceed 6.55 lbs OC/gallon

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in section d)(1) of this permit.

g) Miscellaneous Requirements

(1) None.