



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
HOLMES COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 02-20120**

**Fac ID: 0238000185**

**DATE: 2/1/2005**

Fredericksburg Finishing  
Joe M. Yoder  
8600 County Road 201  
Fredericksburg, OH 44627

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 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. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. 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, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

NEDO



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**Permit To Install  
Terms and Conditions**

**Issue Date: 2/1/2005  
Effective Date: 2/1/2005**

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**FINAL PERMIT TO INSTALL 02-20120**

Application Number: 02-20120  
Facility ID: 0238000185  
Permit Fee: **\$1200**  
Name of Facility: Fredericksburg Finishing  
Person to Contact: Joe M. Yoder  
Address: 8600 County Road 201  
Fredericksburg, OH 44627

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**8600 County Road 201  
Fredericksburg, Ohio**

Description of proposed emissions unit(s):  
**4 Paint spray booths.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. Permit to Install General Terms and Conditions

#### 1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### 3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**6. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**7. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**8. Termination of Permit to Install**

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

**10. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**11. Applicability**

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

**12. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**13. Source Operation and Operating Permit Requirements After Completion of Construction**

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

Fredericksburg Finishing  
 PTI Application: 02-20120  
 Issued: 2/1/2005

Facility ID: 0238000185

#### 14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

#### 15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

### B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	98.1 tpy

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R001 - Stain booth 1 for the coating of wood furniture. Parts are air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d and B.1 below.  The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-35-07(B).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-35-07(B)	See A.2.c and B.2 below.
	40 CFR 63 Subpart JJ	See A.2.e below.

**2. Additional Terms and Conditions**

- 2.a** Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from clean up material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b** Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings and cleanup materials shall not exceed 17.0 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 2.5 gallons per hour.
- 2.c** The VOC emissions from all coatings and cleanup materials shall not exceed 27.1 tons

per rolling, 12-month period.

- 2.d** The VOC content of each coating shall not exceed 6.8 pounds per gallon, as applied.
- 2.e** According to calculations contained in this permit application, the facility's potential-to-emit is below the 40 CFR Part 63, Subpart JJ MACT thresholds of 10 tons of each individual HAP and 25 tons of total, combined HAPs per rolling 12-month period; thus, this facility is an area source for this MACT. Changes in the formulation of the coatings employed in this emissions unit could cause the facility's potential-to-emit for HAPs to increase above the MACT thresholds. If the potential-to-emit of HAPs exceeds 10 tons per year of an individual HAP or 25 tons per year of total, combined HAPs, this facility becomes a major source and must comply with the requirements for a major source per 40 CFR Part 63, Subpart JJ, within 365 days after the exceedance. A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office.

## **B. Operational Restrictions**

1. The daily operations of this emissions unit shall be limited to 10 hours.
2. The annual hours of operation of this emissions unit shall not exceed 3120 hours per rolling, 12-month period. The permittee has existing production records such that there is no need for first year monthly usage limitations.
3. All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed;

- c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
- d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
- e. the total number of hours the emissions unit was in operation; and
- f. the average hourly OC emission rate for all coatings and photochemically reactive 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).]

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
  - a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
  - c. the volatile organic compound (VOC) content of each non-photochemically cleanup material, in lbs/gallon;
  - d. the number of gallons of each cleanup material employed minus the number of gallons of cleanup material recovered for disposal; and
  - e. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/day, i.e., sum of (c) times (d).
  - f. the number of gallons of each coating employed;
  - g. the volatile organic compound (VOC) content of each coating, in lbs/gallon;
  - h. the total VOC emission rate for all non-photochemically coatings, in lbs/day;
  - i. the total number of hours the emissions unit was in operation; and

- j. the average hourly VOC emission rate for all coatings, i.e., (h)/(i), in lbs/hr.
  - k. the average hourly VOC emission rate for all cleanup material,
  - l. the average hourly VOC emission rate for all coating and cleanup material, in lbs/hr.
4. The permittee shall collect and record the following information for each month for the emissions unit:
- a. the total hours of operation for the month;
  - b. the total hours of operation for the previous, 12-month period; and
  - c. the actual VOC emissions for the previous, 12-month period (i.e., sum of daily coating VOC emissions for the previous, 12-month period).
5. The permit to install for the four emissions units in this PTI were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC) adjusted to reflect the operation hour limitation in this permit. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Isobutyl alcohol

TLV (mg/m<sup>3</sup>): 151.6

Maximum Hourly Emission Rate (lbs/hr): 3.65

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 6,489

Adjusted MAGLC (ug/m<sup>3</sup>): 10,105

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air

"Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

**Emissions Unit ID: R001**

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee submit quarterly deviation reports that identify:
  - a. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
  - b. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings and cleanup materials exceeded 17.0 pounds per hour, and the actual average VOC emissions for each such day; and
  - c. each day during which the VOC content of any coating exceeded 6.8 pounds per gallon and the actual VOC content of each such coatings employed;
  - d. any exceedance of the operating hour limitation, as a 12-month summation and the actual hours of operation during such period.

The permittee shall identify the cause for the emission exceedance and any corrective action taken. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office).

3. The permittee shall also submit an annual report that includes:
  - a. a statement of each allowable emissions limit and operational restriction in Sections A.1, A.2 and B.1;
  - b. a statement whether the emissions unit is in compliance with the emissions limits and operational restrictions; and
  - c. the total annual VOC emissions.

The report shall be submitted to the Director (Ohio EPA, Northeast District Office) by February 1 of each year and shall cover the previous calendar year.

## **E. Testing Requirements**

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.
  - b. Emissions Limitation:  
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.
  - c. Emissions Limitation:  
17.0 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.3.1. based on the record keeping specified in Section C.3.
  - d. Emissions Limitation:  
27.1 tons of VOC emissions per year from all coatings and cleanup material  
  
Applicable Compliance Method:  
Compliance shall be determined by the value recorded in C.4 based on the record keeping as specified in Section C.2 and C.3.
  - e. Emissions Limitation:  
6.8 pound of VOC per gallon coating  
  
Applicable Compliance Method:  
Any determination of VOC content, solids contents, or density of coating material shall be

**Emissions Unit ID: R001**

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

#### **F. Miscellaneous Requirements**

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and condition of this permit to install are federally enforceable: A-F, except B.1 and C.5, C.6, and C.7.

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R002 - Stain booth 2 for the coating of wood furniture. Parts are air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d and B.1 below.  The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-35-07(B).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-35-07(B)	See A.2.c and B.2 below.
	40 CFR 63, Subpart JJJ	See A.2.e below.

**2. Additional Terms and Conditions**

- 2.a Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from clean up material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings and cleanup materials shall not exceed 17.0 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 2.5 gallons per hour.

Emissions Unit ID: **R002**

- 2.c** The VOC emissions from all coatings and cleanup materials shall not exceed 27.1 tons per rolling, 12-month period.
- 2.d** The VOC content of each coating shall not exceed 6.8 pounds per gallon, as applied.
- 2.e** According to calculations contained in this permit application, the facility's potential-to-emit is below the 40 CFR Part 63, Subpart JJ MACT thresholds of 10 tons of each individual HAP and 25 tons of total, combined HAPs per rolling 12-month period; thus, this facility is an area source for this MACT. Changes in the formulation of the coatings employed in this emissions unit could cause the facility's potential-to-emit for HAPs to increase above the MACT thresholds. If the potential-to-emit of HAPs exceeds 10 tons per year of an individual HAP or 25 tons per year of total, combined HAPs, this facility becomes a major source and must comply with the requirements for a major source per 40 CFR Part 63, Subpart JJ, within 365 days after the exceedance. A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office.

## **B. Operational Restrictions**

- 1. The daily operations of this emissions unit shall be limited to 10 hours.
- 2. The annual hours of operation of this emissions unit shall not exceed 3120 hours per rolling, 12-month period. The permittee has existing production records such that there is no need for first year monthly usage limitations.
- 3. All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.

## **C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed;

- c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
- d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
- e. the total number of hours the emissions unit was in operation; and
- f. the average hourly OC emission rate for all coatings and photochemically reactive 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).]

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
  - a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
  - c. the volatile organic compound (VOC) content of each non-photochemically cleanup material, in lbs/gallon;
  - d. the number of gallons of each cleanup material employed minus the number of gallons of cleanup material recovered for disposal; and
  - e. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/day, i.e., sum of (c) times (d).
  - f. the number of gallons of each coating employed;
  - g. the volatile organic compound (VOC) content of each coating, in lbs/gallon;
  - h. the total VOC emission rate for all non-photochemically coatings, in lbs/day;
  - i. the total number of hours the emissions unit was in operation; and

- j. the average hourly VOC emission rate for all coatings, i.e., (h)/(i), in lbs/hr.
  - k. the average hourly VOC emission rate for all cleanup material,
  - l. the average hourly VOC emission rate for all coating and cleanup material, in lbs/hr.
4. The permittee shall collect and record the following information for each month for the emissions unit:
- a. the total hours of operation for the month;
  - b. the total hours of operation for the previous, 12-month period; and
  - c. the actual VOC emissions for the previous, 12-month period (i.e., sum of daily coating VOC emissions for the previous, 12-month period).
5. The permit to install for the four emissions units in this PTI were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC) adjusted to reflect the operation hour limitation in this permit. The following summarizes the results of the modeling for the "worst case" pollutant(s):
- Compound: Isobutyl alcohol
- TLV (mg/m<sup>3</sup>): 151.6
- Maximum Hourly Emission Rate (lbs/hr): 3.65
- Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 6,489
- Adjusted MAGLC (ug/m<sup>3</sup>): 10,105
6. Physical changes to or changes in the method of operation of the emissions unit after its

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installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee submit quarterly deviation reports that identify:
  - a. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
  - b. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings and cleanup materials exceeded 17.0 pounds per hour, and the actual average VOC emissions for each such day; and
  - c. each day during which the VOC content of any coating exceeded 6.8 pounds per gallon and the actual VOC content of each such coatings employed;
  - d. any exceedance of the operating hour limitation, as a 12-month summation and the actual hours of operation during such period.

The permittee shall identify the cause for the emission exceedance and any corrective action taken. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office).

3. The permittee shall also submit an annual report that includes:
  - a. a statement of each allowable emissions limit and operational restriction in Sections A.1, A.2 and B.1;
  - b. a statement whether the emissions unit is in compliance with the emissions limits and operational restrictions; and
  - c. the total annual VOC emissions.

The report shall be submitted to the Director (Ohio EPA, Northeast District Office) by February 1 of each year and shall cover the previous calendar year.

## E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:  
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.

- b. Emissions Limitation:  
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.

- c. Emissions Limitation:  
17.0 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.3.i. based on the record keeping specified in Section C.3.

- d. Emissions Limitation:  
27.1 tons of VOC emissions per year from all coatings and cleanup material

Applicable Compliance Method:

Compliance shall be determined by the value recorded in C.4 based on the record keeping as specified in Section C.2 and C.3.

- e. Emissions Limitation:  
6.8 pound of VOC per gallon coating

Applicable Compliance Method:

Any determination of VOC content, solids contents, or density of coating material shall be

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

#### **F. Miscellaneous Requirements**

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and condition of this permit to install are federally enforceable: A-F, except B.1 and C.5, C.6, and C.7.

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R003 - Sealer booth 1 for the coating of wood furniture. Parts are air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d, A.2.e and B.1 below.  The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-35-07(B).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-35-07(B)	See A.2.c and B.2 below.
	40 CFR 63, Subpart JJJ	See A.2.e below.

### 2. Additional Terms and Conditions

- 2.a Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from clean up material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the VOC emissions from coatings and cleanup materials shall not exceed 14.5 pounds per hour, as a daily average. This limit is based upon the application rate of 2.5 gallons per hour.

- 2.c The VOC emissions from all coatings and cleanup materials shall not exceed 22.6 tons per rolling, 12-month period.
- 2.d The VOC content of each coating shall not exceed 5.8 pounds per gallon, as applied.
- 2.e According to calculations contained in this permit application, the facility's potential-to-emit is below the 40 CFR Part 63, Subpart JJ MACT thresholds of 10 tons of each individual HAP and 25 tons of total, combined HAPs per rolling 12-month period; thus, this facility is an area source for this MACT. Changes in the formulation of the coatings employed in this emissions unit could cause the facility's potential-to-emit for HAPs to increase above the MACT thresholds. If the potential-to-emit of HAPs exceeds 10 tons per year of an individual HAP or 25 tons per year of total, combined HAPs, this facility becomes a major source and must comply with the requirements for a major source per 40 CFR Part 63, Subpart JJ, within 365 days after the exceedance. A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office.

## **B. Operational Restrictions**

1. The daily operations of this emissions unit shall be limited to 10 hours.
2. The annual hours of operation of this emissions unit shall not exceed 3120 hours per rolling, 12-month period. The permittee has existing production records such that there is no need for first year monthly usage limitations.
3. All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material

- employed;
- c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation;
  - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average); and
  - g. the content of isobutanol in each coating, as applied.

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

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
  - a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
  - c. the volatile organic compound (VOC) content of each non-photochemically cleanup material, in lbs/gallon;
  - d. the number of gallons of each cleanup material employed minus the number of gallons of cleanup material recovered for disposal; and
  - e. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/day, i.e., sum of (c) times (d).
  - f. the number of gallons of each coating employed;
  - g. the volatile organic compound (VOC) content of each coating, in lbs/gallon;

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- h. the total VOC emission rate for all non-photochemically coatings, in lbs/day;
  - i. the total number of hours the emissions unit was in operation; and
  - j. the average hourly VOC emission rate for all coatings, i.e., (h)/(i), in lbs/hr.
  - k. the average hourly VOC emission rate for all cleanup material,
  - l. the average hourly VOC emission rate for all coating and cleanup material, in lbs/hr.
4. The permittee shall collect and record the following information for each month for the emissions unit:
- a. the total hours of operation for the month;
  - b. the total hours of operation for the previous, 12-month period; and
  - c. the actual VOC emissions for the previous, 12-month period (i.e., sum of daily coating VOC emissions for the previous, 12-month period).
5. The permit to install for the four emissions units in this PTI were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC) adjusted to reflect the operation hour limitation in this permit. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Isobutyl alcohol

TLV (mg/m<sup>3</sup>): 151.6

Maximum Hourly Emission Rate (lbs/hr): 3.65

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 6,489

Adjusted MAGLC (ug/m<sup>3</sup>): 10,105

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### D. Reporting Requirements

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee submit quarterly deviation reports that identify:
  - a. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
  - b. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings and cleanup materials exceeded 14.5 pounds per hour, and the actual average VOC emissions for each such day;
  - c. each day during which the VOC content of any coating exceeded 5.8 pounds per gallon and the actual VOC content of each such coatings employed; and
  - d. any exceedance of the operating hour limitation, as a 12-month summation and the actual hours of operation during such period.

The permittee shall identify the cause for the emission exceedance and any corrective action taken. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office).

3. The permittee shall also submit an annual report that includes:
  - a. a statement of each allowable emissions limit and operational restriction in Sections A.1, A.2 and B.1;
  - b. a statement whether the emissions unit is in compliance with the emissions limits and operational restrictions; and
  - c. the total annual VOC emissions.

The report shall be submitted to the Director (Ohio EPA, Northeast District Office) by February 1 of each year and shall cover the previous calendar year.

**E. Testing Requirements**

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.
  - b. Emissions Limitation:  
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.

- c. Emissions Limitation:  
14.5 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.
- Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.3.1. based on the record keeping specified in Section C.3.
- d. Emissions Limitation:  
22.6 tons of VOC emissions per year from all coatings and cleanup material
- Applicable Compliance Method:  
Compliance shall be determined by the value recorded in C.4 based on the record keeping as specified in Section C.2 and C.3.
- e. Emissions Limitation:  
5.8 pound of VOC per gallon coating
- Applicable Compliance Method:  
Any determination of VOC content, solids contents, or density of coating material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings. In accordance with OAC rule 3745-21-04(B)(5), the permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24 or Method 24A. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

## F. Miscellaneous Requirements

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and condition of this permit to install are federally enforceable: A-F, except B.1 and C.5, C.6, and C.7.

## PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R004 - Topcoat booth 2 for the coating of wood furniture. Parts are air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d, and B.1 below.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-35-07(B).
	OAC rule 3745-35-07(B)	See A.2.a. below.
	40 CFR 63, Subpart	See A.2.c and B.2 below.
		See A.2.e below.

### 2. Additional Terms and Conditions

- 2.a Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from clean up material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the VOC emissions from coatings and cleanup materials shall not exceed 13.3 pounds per hour, as a daily average. This limit is based upon the application rate of 2.5 gallons per hour.

- 2.c The VOC emissions from all coatings and cleanup materials shall not exceed 21.3 tons per rolling, 12-month period.
- 2.d The VOC content of each coating shall not exceed 5.3 pounds per gallon, as applied.
- 2.e According to calculations contained in this permit application, the facility's potential-to-emit is below the 40 CFR Part 63, Subpart JJ MACT thresholds of 10 tons of each individual HAP and 25 tons of total, combined HAPs per rolling 12-month period; thus, this facility is an area source for this MACT. Changes in the formulation of the coatings employed in this emissions unit could cause the facility's potential-to-emit for HAPs to increase above the MACT thresholds. If the potential-to-emit of HAPs exceeds 10 tons per year of an individual HAP or 25 tons per year of total, combined HAPs, this facility becomes a major source and must comply with the requirements for a major source per 40 CFR Part 63, Subpart JJ, within 365 days after the exceedance. A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office.

## **B. Operational Restrictions**

1. The daily operations of this emissions unit shall be limited to 10 hours.
2. The annual hours of operation of this emissions unit shall not exceed 3120 hours per rolling, 12-month period. The permittee has existing production records such that there is no need for first year monthly usage limitations.
3. All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material

- employed;
- c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
  - d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
  - e. the total number of hours the emissions unit was in operation; and
  - f. the average hourly OC emission rate for all coatings and photochemically reactive 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).]

- 3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
  - a. the company identification for each coating or cleanup material employed;
  - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
  - c. the volatile organic compound (VOC) content of each non-photochemically cleanup material, in lbs/gallon;
  - d. the number of gallons of each cleanup material employed minus the number of gallons of cleanup material recovered for disposal; and
  - e. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/day, i.e., sum of (c) times (d).
  - f. the number of gallons of each coating employed;
  - g. the volatile organic compound (VOC) content of each coating, in lbs/gallon;
  - h. the total VOC emission rate for all non-photochemically coatings, in lbs/day;
  - i. the total number of hours the emissions unit was in operation; and

- j. the average hourly VOC emission rate for all coatings, i.e., (h)/(i), in lbs/hr.
  - k. the average hourly VOC emission rate for all cleanup material,
  - l. the average hourly VOC emission rate for all coating and cleanup material, in lbs/hr.
4. The permittee shall collect and record the following information for each month for the emissions unit:
- a. the total hours of operation for the month;
  - b. the total hours of operation for the previous, 12-month period; and
  - c. the actual VOC emissions for the previous, 12-month period (i.e., sum of daily coating VOC emissions for the previous, 12-month period).
5. The permit to install for the four emissions units in this PTI were evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC) adjusted to reflect the operating hour limitation in this permit. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Isobutyl alcohol

TLV (mg/m<sup>3</sup>): 151.6

Maximum Hourly Emission Rate (lbs/hr): 3.65

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 6,489

Adjusted MAGLC (ug/m<sup>3</sup>): 10,105

6. Physical changes to or changes in the method of operation of the emissions unit after its

Emissions Unit ID: **R004**

installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

#### **D. Reporting Requirements**

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee submit quarterly deviation reports that identify:
  - a. for the days during which a photochemically reactive material was employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
  - b. for the days during which a photochemically reactive material was not employed, each day during which the average VOC emissions from the coatings and cleanup materials exceeded 13.3 pounds per hour, and the actual average VOC emissions for each such day; and
  - c. each day during which the VOC content of any coating exceeded 5.3 pounds per gallon and the actual VOC content of each such coatings employed;
  - d. any exceedance of the operating hour limitation, as a 12-month summation and the actual hours of operation during such period.

The permittee shall identify the cause for the emission exceedance and any corrective action taken. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office).

3. The permittee shall also submit an annual report that includes:
  - a. a statement of each allowable emissions limit and operational restriction in Sections A.1, A.2 and B.1;
  - b. a statement whether the emissions unit is in compliance with the emissions limits and operational restrictions; and
  - c. the total annual VOC emissions.

The report shall be submitted to the Director (Ohio EPA, Northeast District Office) by February 1 of each year and shall cover the previous calendar year.

## E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.
  - b. Emissions Limitation:  
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.
  - c. Emissions Limitation:  
13.3 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.  
  
Applicable Compliance Method:  
Compliance shall be determined by the daily values calculated in C.3.f. based on the record keeping specified in Section C.3.
  - d. Emissions Limitation:  
21.3 tons of VOC emissions per year from all coatings and cleanup material  
  
Applicable Compliance Method:  
Compliance shall be determined by the value recorded in C.5 based on the record keeping as specified in Section C.2, C.3 and C.4.
  - e. Emissions Limitation:  
5.3 pound of VOC per gallon coating  
  
Applicable Compliance Method:  
Any determination of VOC content, solids contents, or density of coating material shall be

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

#### **F. Miscellaneous Requirements**

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and condition of this permit to install are federally enforceable: A-F, except B.1 and C.5, C.6, and C.7.