Facility ID: 0238000184 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

Go to Part II for Emissions Unit R001
Go to Part II for Emissions Unit R002
Go to Part II for Emissions Unit R003

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Facility ID: 0238000184 Emissions Unit ID: R001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

   (a) None.

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

   (a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
spray booth to stain wood furniture consisting of one manual spray gun/pump and overspray filters; parts are air dried and manually moved	OAC rule 3745-31-05(A)(3) (PTI 02-20028 modified 6/16/05)	See sections A.2.b, A.2.d, B.1 and B.3 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 section A.2.a below.
	OAC rule 3745-35-07(B)	See section A.2.c and B.2 below.

2. **Additional Terms and Conditions**

   (a) Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive cleanup materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
   Each day that photochemically reactive materials [as defined in OAC rule 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings and cleanup materials shall not exceed 16.5 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 3.0 gallons per hour.
   The VOC emissions from all coatings and cleanup materials shall not exceed 28.7 tons per rolling, 12-month period.
   The VOC content of each coating shall not exceed 5.5 pounds per gallon, as applied.

B. **Operational Restrictions**

1. The operations of this emissions unit shall be limited to 13 hours per day and 5 days per week.

2. The annual hours of operation of this emissions unit shall not exceed 3380 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 Record Keeping 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);

g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and

h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:

a. the company identification for each coating employed;

b. the number of gallons of each coating employed;

c. the volatile organic compound (VOC) content of each coating, in lbs/gallon;

d. the total VOC emission rate for all coatings, in lbs/day;

e. the total number of hours the emissions unit was in operation; and

f. the average hourly VOC emission rate for all coatings, i.e., (d)/(e), in lbs/hr.

4. The permittee shall collect and record the following information for each month for this emissions unit:

a. the company identification for each cleanup material;

b. documentation on whether or not each cleanup material employed is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);

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 tons per month, i.e., sum of (c) times (d).

[Note: Usage of photochemically reactive cleanup material shall be recorded daily according to C.2 above.]

5. 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 plus the monthly cleanup emissions for the previous, 12-month period).

6. The permit to install for this emissions unit [R001] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Mineral spirits

TLV (mg/m3): 1,200

Maximum Hourly Emission Rate (lbs/hr): 3.58

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2,161

MAGLC (ug/m3): 28,571

7. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

8. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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 the 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 (Ohio EPA, Northeast District Office) 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 occurrence;

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 16.5 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 5.5 pounds per gallon and the actual VOC content of each such coating employed; and

d. any exceedance of the operating hour limitation, as a rolling, 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 emission limit and operational restriction in sections A.1, A.2 and B;

b. a statement whether the emissions unit is in compliance with the emission 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:
Emission 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 section C.2.f based upon the record keeping requirements specified in section C.2.
Emission 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 section C.2.d based upon the record keeping requirements specified in section C.2.
Emission Limitation:

16.5 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 section C.3.f based on the record keeping requirements specified in section C.3.
Emission Limitation:

28.7 tons of VOC emissions per year from all coatings and cleanup material

Applicable Compliance Method:

Compliance shall be determined by the values recorded in section C.5 based on the record keeping requirements as specified in sections C.2, C.3 and C.4.
Emission Limitation:

5.5 pounds 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 through F, except B.1 and C.6, C.7 and C.8.

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Facility ID: 0238000184 Emissions Unit ID: R002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
spray booth to stain wood furniture consisting of one manual spray gun/pump and overspray filters; parts are air dried and manually moved	OAC rule 3745-31-05(A)(3) (PTI 02-20028 modified 6/16/05)	See sections A.2.b, A.2.d, A.2.e, B.1 and B.3 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 section A.2.a below.
	OAC rule 3745-35-07(B)	See section A.2.c and B.2 below.

2. **Additional Terms and Conditions**

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

cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.

Each day that photochemically reactive materials [as defined in OAC rule 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings and cleanup materials shall not exceed 15.6 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 3.0 gallons per hour.

The VOC emissions from all coatings and cleanup materials shall not exceed 27.2 tons per rolling, 12-month period.

The VOC content of each coating shall not exceed 5.2 pounds per gallon, as applied.

The content of isobutanol of the coatings, as applied, shall not exceed 1.22 pounds per gallon.

B. **Operational Restrictions**

1. The operations of this emissions unit shall be limited to 13 hours per day and 5 days per week.

2. The annual hours of operation of this emissions unit shall not exceed 3380 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 Record Keeping 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);

   g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and

   h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:

   a. the company identification for each coating employed;

   b. the number of gallons of each coating employed;

   c. the volatile organic compound (VOC) content of each coating, in lbs/gallon;

   d. the total VOC emission rate for all coatings, in lbs/day;

   e. the total number of hours the emissions unit was in operation;

   f. the average hourly VOC emission rate for all coatings, i.e., (d)/(e), in lbs/hr and

   g. the content of isobutanol in each coating, as applied.

4. The permittee shall collect and record the following information for each month for this emissions unit:

   a. the company identification for each cleanup material;

   b. documentation on whether or not each cleanup material employed is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);

   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 tons per month, i.e., sum of (c) times (d).

   [Note: Usage of photochemically reactive cleanup material shall be recorded daily according to C.2 above.]

5. 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 plus the monthly cleanup emissions for the previous, 12-month period).

6. The permit to install for this emissions unit [R002] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Isobutanol

TLV (mg/m3): 180

Maximum Hourly Emission Rate (lbs/hr): 7.3

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 9,211

MAGLC (ug/m3): 9,328

7. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

8. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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 the 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 (Ohio EPA, Northeast District Office) 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 occurrence;

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 15.6 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 5.2 pounds per gallon and the actual VOC content of each such coating employed; and

d. any exceedance of the operating hour limitation, as a rolling, 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 emission limit and operational restriction in sections A.1, A.2 and B;

b. a statement whether the emissions unit is in compliance with the emission 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:
Emission 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 section C.2.f based upon the record keeping requirements specified in section C.2.
Emission 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 section C.2.d based upon the record keeping requirements specified in section C.2.
Emission Limitation:

15.6 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 section C.3.f based on the record keeping requirements specified in section C.3.
Emission Limitation:

27.2 tons of VOC emissions per year from all coatings and cleanup material

Applicable Compliance Method:

Compliance shall be determined by the values recorded in section C.5 based on the record keeping requirements as specified in sections C.2, C.3 and C.4.
Emission Limitation:

5.2 pounds 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.
Emission Limitation:

1.22 pounds of isobutanol per gallon coating

Applicable Compliance Method:

Any determination of OC composition 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.

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 through F, except B.1 and C.6, C.7 and C.8.

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Facility ID: 0238000184 Emissions Unit ID: R003 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
South spray booth and drying oven to seal and topcoat wood furniture consisting of one manual spray gun/pump and overspray filters	OAC rule 3745-31-05(A)(3) (PTI 02-20028 modified 6/16/05)	See sections A.2.b, A.2.d, A.2.e, B.1 and B.3 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 section A.2.a below.
	OAC rule 3745-35-07(B)	See section A.2.c and B.2 below.

2. **Additional Terms and Conditions**

(a) Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and from photochemically reactive cleanup materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
Each day that photochemically reactive materials [as defined in OAC rule 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings and cleanup materials shall not exceed 15.6 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 3.0 gallons per hour.
The VOC emissions from all coatings and cleanup materials shall not exceed 27.2 tons per rolling, 12-month period.
The VOC content of each coating shall not exceed 5.2 pounds per gallon, as applied.
The content of isobutanol of the coatings, as applied, shall not exceed 1.22 pounds per gallon.

B. **Operational Restrictions**

1. The operations of this emissions unit shall be limited to 13 hours per day and 5 days per week.

2. The annual hours of operation of this emissions unit shall not exceed 3380 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 Record Keeping 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);

g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and

h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:

a. the company identification for each coating employed;

b. the number of gallons of each coating employed;

c. the volatile organic compound (VOC) content of each coating, in lbs/gallon;

d. the total VOC emission rate for all coatings, in lbs/day;

e. the total number of hours the emissions unit was in operation;

f. the average hourly VOC emission rate for all coatings, i.e., (d)/(e), in lbs/hr and

g. the content of isobutanol in each coating, as applied.

4. The permittee shall collect and record the following information for each month for this emissions unit:

a. the company identification for each cleanup material;

b. documentation on whether or not each cleanup material employed is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);

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 tons per month, i.e., sum of (c) times (d).

[Note: Usage of photochemically reactive cleanup material shall be recorded daily according to C.2 above.]

5. 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 plus the monthly cleanup emissions for the previous, 12-month period).

6. The permit to install for this emissions unit [R003] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Isobutanol

TLV (mg/m3): 180

Maximum Hourly Emission Rate (lbs/hr): 7.3

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 9,211

MAGLC (ug/m3): 9,328

7. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

8. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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 the 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 (Ohio EPA, Northeast District Office) 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 occurrence;

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 15.6 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 5.2 pounds per gallon and the actual VOC content of each such coating employed; and

d. any exceedance of the operating hour limitation, as a rolling, 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 emission limit and operational restriction in sections A.1, A.2 and B;

b. a statement whether the emissions unit is in compliance with the emission 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:
Emission 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 section C.2.f based upon the record keeping requirements specified in section C.2.
Emission 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 section C.2.d based upon the record keeping requirements specified in section C.2.
Emission Limitation:

15.6 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 section C.3.f based on the record keeping requirements specified in section C.3.
Emission Limitation:

27.2 tons of VOC emissions per year from all coatings and cleanup material

Applicable Compliance Method:

Compliance shall be determined by the values recorded in section C.5 based on the record keeping requirements as specified in sections C.2, C.3 and C.4.
Emission Limitation:

5.2 pounds 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.
Emission Limitation:

1.22 pounds of isobutanol per gallon coating

Applicable Compliance Method:

Any determination of OC composition 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.

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 through F, except B.1 and C.6, C.7 and C.8.