

Facility ID: 0238000185 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.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0238000185 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Stain booth 2 for the coating of wood furniture. Parts are air dried.	OAC rule 3745-31-05(A)(3) (PTI 02-20120 effective 2/1/05)	See sections A.2.b, A.2.d and B.1 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).
	OAC rule 3745-21-07(G)(2)	See section A.2.a below.
	OAC rule 3745-31-05(C)	See sections A.2.c and B.2 below.
	40 CFR Part 63, Subpart JJ	See section A.2.e below.
	OAC rule 3745-114-01	See sections C.5, C.6, C.7, C.8 and D.4 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 materials shall not exceed 8 pounds per hour and 40 pounds 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.
 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 14.5 pounds per hour, as a daily average. This emission limitation is based upon the maximum application rate of 2.5 gallons per hour.
 The VOC emissions from all coatings and cleanup materials shall not exceed 22.6 tons per rolling, 12-month period.
 The VOC content of each coating shall not exceed 5.8 pounds per gallon, as applied.
 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 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; 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;
 - 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 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;
 - 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; and
 - 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 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 application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Isobutyl alcohol

TLV (mg/m³): 151.6

Maximum Hourly Emission Rate 3.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 6,489

Adjusted MAGLC (ug/m³): 10,105

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

6. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

7. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

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;

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; 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 emission limitation 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.

4. The permittee shall submit annual reports to the Ohio EPA Northeast District Office, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

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

Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in section C.2.f based upon the record keeping requirements specified in section C.2.

Emission Limitation:

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

Applicable Compliance Method:

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

Emission Limitation:

Each day that photochemically reactive materials [as defined in OAC rule 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.

Applicable Compliance Method:

Compliance shall be demonstrated by the daily values calculated in section C.3.l based upon the record keeping requirements specified in section C.3.

Emission Limitation:

The VOC emissions from all coatings and cleanup materials shall not exceed 22.6 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by the value recorded in section C.4 based upon the record keeping requirements specified in sections C.2 and C.3.

Emission Limitation:

The VOC content of each coating shall not exceed 5.8 pounds per gallon, as applied.

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 3745-31-05, the following terms and condition of this permit to install are federally enforceable: A through F, except B.1, C.5, C.6, C.7, C.8 and D.4.