

Facility ID: 0819020243 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: 0819020243 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R002 - Coating/staining booth No. 2	OAC rule 3745-31-05(A)(3) PTI 08-04740	The organic compound (OC) emissions from this emissions unit shall not exceed 79 lbs/day and 9.0 tons per year, excluding clean up.  The volatile organic compound (VOC) emissions, including clean up, from emissions units P001, R001, R002 and R003 shall not exceed 25 TPY based upon a rolling 12-month summation.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(A)(2)(c) and 3745-35-07(B).  See A.2.a.
	OAC rule 3745-21-07(A)(2)(c)	See A.2.a.
	OAC rule 3745-35-07(B) (Synthetic minor to avoid Title V and MACT)	The individual hazardous air pollutant (HAP) emissions from emissions units P001, R001, R002 and R003 shall not exceed 9.9 TPY and combined HAP emissions shall not exceed 24.9 TPY based upon a rolling, 12-month summation.  See A.2.b.
	40 CFR Part 63, Subpart JJ	

**2. Additional Terms and Conditions**

- (a) The facility is located in Darke County and potential OC emissions are less than 100 tons, therefore, OAC rule 3745-21-07 is not applicable. According to 40 CFR Part 63, Subpart JJ, a wood furniture manufacturer that emits less than 5 TPY of individual HAP and 12.5 TPY of combined HAP, per rolling 12-month period, is considered an area source (40 CFR 63.800(b)(3)). The initial compliance date for the Wood Furniture Manufacturing NESHAP (40 CFR Part 63, Subpart JJ) was December 7, 1998. According to 40 CFR 63.800(b) sources obtaining and complying with limits to keep the potential to emit HAPs below major source levels after the first compliance date and prior to exceeding area source limits, are precluded from major source permitting requirements.

**B. Operational Restrictions**

1. The maximum coating, thinner, adhesive and clean up material use excluding liquid wastes recovered for off-site disposal, in emissions units P001, R001, R002 and R003 combined shall not exceed 9.9 TPY of any individual HAP and 24.9 TPY for any combination of HAPs, based on a 12-month rolling summation. The permittee has existing coating, thinner, adhesive and clean up material usage records and therefore does not need to be limited in the first year on a monthly basis.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emission unit:

- a. The name and identification of each coating and thinner employed.
  - b. The volume, in gallons, of each coating and thinner, employed.
  - c. The OC content of each coating and thinner employed, in pounds of OC per gallon.
  - d. The total OC emissions from all coatings and thinners in pounds per day, for this emission unit (the sum of  $b \times c$  for each coating and thinner).
2. The permittee shall collect and record the following information each month for the purpose of determining annual OC emissions from this emissions unit.
    - a. The total OC emissions from all coatings and thinners used in this emissions unit (the sum of the daily emissions calculated as specified in C.1).
    - b. The sum of the monthly OC emissions rates calculated (in a) for each calendar year.
3. The permittee shall collect and record the following information each month for emissions units P001, R001, R002 and R003:
    - a. The name and identification of each coating, thinner, adhesive and clean up material employed.
    - b. The volume, in gallons, of each coating, thinner, adhesive and clean up material employed.
    - c. The VOC content of each coating, thinner, adhesive and clean up material employed, in pounds of VOC per gallon.
    - d. The volume, in gallons, of clean up material recovered for disposal as liquid waste.
    - e. The total VOC emissions from all coating, thinner, adhesive and clean up materials, in pounds or tons per month, for this emission unit (the sum of  $b \times c$  for all coating, thinner, adhesive and clean up material minus the sum of  $c \times d$  for all clean up materials).
    - f. The rolling, 12-month summation of the monthly VOC emissions from emissions units P001, R001, R002 and R003 (the sum of the monthly emissions rates calculated (in e) for the previous 12 months for each emissions unit).
4. The permittee shall collect and record the following information each month for emissions units P001, R001, R002 and R003:
    - a. The name and identification number of each coating, thinner, adhesive and clean up material employed in this emission unit.
    - b. The volume, in gallons, of each coating, thinner, and cleanup material employed.
    - c. The individual HAP content of each coating, thinner, adhesive and clean up material employed, in pounds of individual HAP per gallon.
    - d. The volume, in gallons, of clean up material that is disposed of as liquid waste.
    - e. The total individual HAP emissions from all coatings, thinners and cleanup materials employed, in pounds per month, for this emission unit (the sum of  $b \times c$  for each coating, thinner, adhesive and clean up material minus the sum of  $c \times d$  for clean up material disposed of as liquid waste).
    - f. The rolling, 12-month summation of the monthly individual HAP emissions from emissions units P001, R001, R002 and R003 (the sum of the monthly emissions rates calculated (in e) for the previous 12 months for each emissions unit).
    - g. The combined HAP content of each coating, thinner, adhesive and clean up material employed, in pounds of combined HAP per gallon.
    - h. The combined HAP emissions from all coatings, thinners and cleanup materials employed, in pounds per month, for this emission unit (the sum of  $b \times g$  for each coating, thinner, adhesive and clean up material minus the sum of  $d \times g$  for clean up material disposed of as liquid waste).
    - i. The rolling, 12-month summation of the monthly combined HAP emissions from emissions units P001, R001, R002 and R003 (the sum of the monthly emissions rates calculated (in h) for the previous 12 months for each emissions unit).
5. The permit to install for this emissions unit (R002) was evaluated based on the actual materials (typically coatings) 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 ISCST3 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
 

Pollutant: dibutyl phthalate  
 TLV (mg/m3): 5,000 mg/m3  
 Maximum Hourly Emission Rate (lbs/hr): 0.72 lbs/hr  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 92.3 ug/m3  
 MAGLC (ug/m3): 119 ug/m3

Pollutant: mineral spirits  
 TLV (mg/m3): 572,597 mg/m3  
 Maximum Hourly Emission Rate (lbs/hr): 14.5 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,848 ug/m3  
 MAGLC (ug/m3): 13,633 ug/m3

Pollutant: N-butyl acetate  
 TLV (mg/m3): 712,638 mg/m3  
 Maximum Hourly Emission Rate (lbs/hr): 14.2 lbs/hr  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,818 ug/m3

Pollutant: 1-methoxy-2-propanol  
 TLV (mg/m3): 368,589 mg/m3  
 Maximum Hourly Emission Rate (lbs/hr): 17.2 lbs/hr  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,202 ug/m3  
 MAGLC (ug/m3): 8,776 ug/m3  
 Pollutant: N-butanol (lowest MAGLC of the remaining air toxics emitted)  
 TLV (mg/m3): 60,630 mg/m3  
 Maximum Hourly Emission Rate (lbs/hr): 11.2 lbs/hr (emissions rate for isopropanol, the highest ground level concentration of the remaining air toxics emitted.)  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,428 ug/m3 (isopropanol, the highest ground level concentration of the remaining air toxics emitted.)  
 MAGLC (ug/m3): 1,444 ug/m3 (N-butanol lowest MAGLC of the remaining air toxics emitted)

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.).
6. 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) is (are) defined as a modification under other provisions of the modification definition, 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 submit quarterly deviation (excursion) reports that include an identification of:
  - a. All days when the OC emissions excluding clean up materials from this emissions unit exceeded 79 pounds.
  - b. All exceedances of the rolling 12-month 25 TPY of VOC emissions limitation from emissions units P001, R001, R002 and R003.
  - c. All exceedances of the rolling 12-month 9.9 TPY of individual HAP emissions limitation from emissions units P001, R001, R002 and R003.
  - d. All exceedances of the rolling 12-month 24.9 TPY of combined HAP emissions limitation from emissions units P001, R001, R002 and R003.

These quarterly deviation (excursion) reports shall be submitted to the Ohio EPA Central District Office or local air agency by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. If no deviations occurred during the calendar quarter, the permittee shall submit a report which states that no deviations occurred during the calendar quarter.
2. The permittee shall submit annual reports to the Director (the appropriate Ohio EPA District Office or local air agency) that specify:
  - a. The total OC emissions, in tons, from all coatings, thinners, adhesives and clean up materials employed in emissions units P001, R001, R002 and R003.
  - b. The total VOC emissions, in tons, from all coatings, thinners, adhesives and clean up materials employed in emissions units P001, R001, R002 and R003.

c. The rolling 12-month individual HAP emissions for each month, in tons, for emissions units P001, R001, R002 and R003.

d. The rolling 12-month combined HAP emissions for each month, in tons, for emissions units P001, R001, R002 and R003.

These reports shall be submitted by April 15 of each year and shall cover the previous calendar year. This reporting requirement may be satisfied by including and identifying the specific emission data from this emissions unit in the annual Fee Emission Report.

**E. Testing Requirements**

1. Compliance with the emissions limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation -

The OC emissions from this emissions unit shall not exceed 79 lbs/day, excluding clean up.

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.1 and shall be determined by summing the daily usage, in gallons, of each coating and thinner, as applied, multiplied by its OC content, in pounds per gallon, for each day.

Emission Limitation -

The OC emissions from this emissions unit shall not exceed 9.0 TPY, excluding clean up.

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.2 and shall be determined by summing the monthly emissions rates, for each calendar year.

Emission Limitation -

The VOC emissions, including clean up, from emissions units P001, R001, R002 and R003 shall not exceed 25 TPY based upon a rolling 12-month summation.

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.3 and shall be determined by summing the monthly VOC emissions rates, in tons, on a rolling 12-month basis.

Emission Limitation -

The individual HAP emissions from emissions units P001, R001, R002 and R003 shall not exceed 9.9 TPY.

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.4 and shall be determined by summing the monthly individual HAP emissions rates, in tons, on a rolling 12-month basis.

Emission Limitation -

The combined HAP emissions from emissions units P001, R001, R002 and R003 shall not exceed 24.9 TPY.

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in C.4 and shall be determined by summing the monthly combined HAP emissions rates, in tons, on a rolling 12-month basis.

**F. Miscellaneous Requirements**

1. The terms and conditions of sections A.1., B.1, C.3., C.4., D.1.b., D.1.c., D.1.d., E.1.c., E.1.d., and E.1.e., of this air PTO are federally enforceable.