Facility ID: 1431053946 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: 1431053946 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
R003 - Paint Spray Booth with dry filter	OAC rule 3745-31-05 (A)(3) (PTI 14-04811)	Volatile Organic compound (VOC) emissions shall not exceed 1436.0 pounds per day (lbs/day) from all coatings. VOC emissions shall not exceed 67.0 lbs/day from cleanup materials. See section B.1.
	OAC rule 3745-31-05(C)	VOC emissions shall not exceed 75.65 tons per year (TPY), including cleanup, based upon a rolling, 12-month summation for emissions units R001-R006 combined. See terms A.2.a and A.2.b. See section B.2.
	OAC Rule 3745-21-15	See terms A.2.d through A.2.h and section B.3.
	OAC rule 3745-17-11(C)	See term A.2.i. See sections C.10, C.11 and C.12.

2. **Additional Terms and Conditions**

   (a) The VOC content, as applied, of each coating and cleanup material employed in this emissions unit shall not exceed the following limits:
   Coating/Cleanup Pounds VOC/gallon
   Enamel 4.8
   Varnish (topcoat) 4.9
   Glaze 6.3
   Toner 7.3
   Cleanup/Thinner 6.7
   The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R001, R002, R003, R005, other de minimus air contaminant source, as defined in OAC rule 3745-15-05, and other air contaminant sources exempt from the requirement to obtain a permit-to-install pursuant to OAC rule 3745-31-03 installed subsequent to the issuance of this permit, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.
   Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by usage and emission limitations and VOC content limitations.
   The volatile organic compound (VOC) content of any topcoat shall not exceed 1.8 pounds (lbs) of VOC per lb of solids, as applied, except for acid-cured alkyd amino conversion varnish topcoats.
   The volatile organic compound (VOC) content of any acid-cured alkyd amino conversion varnish topcoat shall not exceed 2.0 lbs of VOC per lb of solids, as applied.
   The VOC content of any sealer shall not exceed 1.9 lbs of VOC per lb of solids, as applied, except for acid-cured alkyd amino sealers.
   The VOC content of any acid-cured alkyd amino sealer shall not exceed 2.3 lbs of VOC per lb of solids, as applied.
   There is not VOC content limit for stains, bsecoats and washcoats.

The permittee shall operate the dry particulate filter system for the coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.

B. **Operational Restrictions**

1. The maximum daily usage rates for this emissions unit shall not exceed 10 gallons of enamel, 70 gallons of varnish, 50 gallons of glaze, 100 gallons of toner and 10 gallons of cleanup material/ thinner.

2. The maximum annual usage rates for emissions units R001-R006 combined shall not exceed 960 gallons of enamel, 7,200 gallons of varnish, 5,000 gallons of glaze, 10,000 gallons of toner, and 1,031 gallons of cleanup material/thinner. The annual usage limits are based upon a rolling, 12-month summation of the usage figures.

3. The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for for each wood furniture manufacturing operation and addresses each of the work practices contained in paragraphs (b) through (d) and (f) through (k) of section 63.803 of subpart JJ of 40 CFR Part 63.

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

1. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each coating employed;

   b. The individual Hazardous Air Pollutant (HAP)* content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;

   c. The total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];

   d. The number of gallons of each coating employed;

   e. The name and identification of each cleanup material/thinner employed;

   f. The individual HAP content for each HAP of each cleanup material/thinner, in pounds of individual HAP per gallon of cleanup material, as applied;

   g. The total combined HAP content of each cleanup material/thinner, in pounds of combined HAPs per gallon of cleanup material/thinner, as applied [sum all the individual HAP contents from (f)];

   h. The number of gallons of each cleanup material employed;

   i. The total individual HAP usage for each HAP from all coatings and cleanup materials/thinner employed, in pounds or tons per month [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material/thinner];

   j. The total combined HAP usage from all coatings and cleanup materials/thinner employed, in pounds or tons per month [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material/thinner];
   k. The updated rolling, 12-month summation of usage for each individual HAP**, in pounds or tons. This shall include the information for the current month and the preceding eleven calender months; and,

   l. The updated rolling, 12-month summation of usage for total combined HAP**, in pounds or tons. This shall include the information for the current month and the preceding eleven calender months.

   * A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

   ** This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.

2. The permittee shall collect and record the following information each day for emissions units R001-R006:

   a. The company identification for each coating (enamel, varnish, glaze and toner) and cleanup material employed;

   b. The VOC content of each coating and cleanup material/thinner, in pounds per gallon, as applied;

   c. The number of gallons of each coating and cleanup material employed.

   d. The total combined VOC emissions from all coatings and cleanup materials/thinner employed, in pounds per day [the sum of (b) times (c) for each coating and cleanup material/thinner];

3. The permittee shall collect and record the following information each month for emissions units R001-R006:

   a. The rolling, 12-month summation of the usage figures for each coating (enamel, varnish, glaze and toner) and cleanup material employed, in gallons; and,

   b. The rolling, 12-month summation of the total combined VOC emissions from all coatings and cleanup materials employed, in pounds or tons.

4. The permittee shall maintain a record of the VOC emission requirement elected to be met under any one paragraph of paragraphs (D)(1) to (D)(5) of OAC rule 3745-21-15.

5. The permittee shall maintain a certified product data sheet for each finishing material that is subject to a VOC emission requirement, and a certified product data sheet for any thinners or other material added to the finishing

materials before application.

6. The permittee shall maintain a record of the VOC content, in pounds of VOC per pound of solids, as applied, of each finishing material, other than a stain, that is subject to a VOC content limit or a daily VOC emissions limit, including documentation on any thinner or other VOC added to the finishing material before application.

7. The permittee shall maintain a record of the VOC content, in lbs of VOC per gallon, as applied of each stain subject to a daily VOC emissions limit, including documentation on any thinner or other VOC added to the stain before application.

8. The permittee shall maintain onsite the work practiece implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to the following:

   (a) Records demonstrating that the operator training program required by 63.803(b) of subpart JJ of 40 CFR Part 63 is in place;

   (b) Records collected in accordance with the inspection and maintenance plan required by section 63.803 (c) of subpart JJ of 40 CFR Part 63;

   (c) Records associated with the cleaning solvent accounting system required section 63.803(d) of subpart JJ of 40 CFR Part 63;

   (d) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by section 63.803(h)(5) of subpart JJ of 40 CFR Part 63; and

   (e) Copies of documentation such as logs developed to demonstrate that other provisions of the work practice implementation plan are followed.

9. The permit to install for this emissions unit R001 was 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 Ground-Level Concentration (MAGLC).

   The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Isobutanol and Butanol

   TLV (g/m3): 151,600

   Maximum Hourly Emission Rate (lbs/hr): 183.58

   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 3388

   MAGLC (g/m3): 3609
   Pollutant: Toluene

   TLV (g/m3): 188,000

   Maximum Hourly Emission Rate (lbs/hr): 183.58

   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 3388

   MAGLC (g/m3): 4476

   Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 with the above changes, the Ohio EPA will not consider the change(s)to be a "modification" under OAC rule 3745-31-01, 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, 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,

c. when the 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.

10. The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

11. The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

12. In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

D. **Reporting Requirements**

1. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the actual usage of HAP limitations set forth in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.

2. The permittee shall submit quarterly reports which specify the rolling, 12-month summation for coating (enamel, varnish, glaze and toner) and cleanup material usage figures for each month and the rolling, 12-month summation for total combined VOC emissions from all coatings and cleanup materials employed for each month.

3. The permittee shall submit deviation (excursion) reports which identify each day during which the organic compound emissions from the coatings (enamel, varnish, glaze and toner) and cleanup material exceeded the limits set forth in Section A.1 of this permit, and the actual organic compound emission rate for each such day.

4. The permittee shall submit deviation (excursion) reports which identify each day during which the coating (enamel, varnish, glaze and toner) and cleanup usage rates exceeded the limits specified in Section B.1 of this permit, and the actual coating and cleanup usage rates for each such day.

5. The permittee shall submit deviation (excursion) reports which identify any daily record showing the use of any coating (enamel, varnish, glaze or toner) or cleanup material which does not comply with the limits in Section A.2.a of this permit, and the actual OC content for each such coating or cleanup material.

6. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

7. The deviation and quarterly reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

8. The permittee shall submit semiannual compliance status reports no later than January 31 and July 31 of each year. These reports shall include the following information:

(a) Any changes to the previous reporting of which paragraph of paragraphs (D)(1) to (D)(5) of OAC rule 3745-21-15 is elected to be met;

(b) Compliance certification for semiannual reporting period containing the following:

(i) For any topcoat or sealer that is subject to the VOC content limit, the compliance certification shall state that compliant coatings for topcoates and sealers, as applicable, have been used each operating day in the semiannual reporting period, or should otherwise identify the periods of use of noncompliant coatings for topcoats and sealers, as applicables, the reasons for the use of noncompliant coatings, and the amounts and VOC contents of each noncompliant coating used.

(ii) The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented.

(iii) The compliance certification shall identify and describe an corrective actions considered and implemented for any noncompliance being reproted in the compliance certification.

(iv) The compliance certification shall be signed by a responsible official of the company that owns or operates the wood furniture manufacturing operations.

E. **Testing Requirements**

1. Emission Limitation:

The VOC content, as applied, of each coating and cleanup material employed in this emissions unit shall not exceed the following limits:
Coating/Cleanup Pounds VOC/gallon
Enamel 4.8
Varnish (topcoat) 4.9
Glaze 6.3
Toner 7.3
Cleanup/Thinner 6.7

Applicable Compliance Method:
Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings.

2. Emission Limitation:

Volatile Organic compound (VOC) emissions shall not exceed 1436.0 pounds per day (lbs/day) from all coatings.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section C.2.

3. Emission Limitation:

VOC emissions shall not exceed 67.0 lbs/day from cleanup materials.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section C.2.

4. Emission Limitation:

VOC emissions shall not exceed 75.65 tons per year (TPY), including cleanup, based upon a rolling, 12-month summation for emissions units R001-R006 combined.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section C.3.

5. Emission Limitation:

The actual usage of HAPs, as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section C.1.

6. Usage Limitations for coatings and cleanup materials/thinner for emissions units R001-R006 combined:

Less than 960 gallons enamel per year;
Less than 7,200 gallons varnish per year;
Less than 5,000 gallons glaze per year;
Less than 10,000 gallons toner per year; and
Less than 1,031 gallons cleanup materials per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Sections C.2. and C.3.

7. Usage Limitations for coatings and cleanup materials for emissions unit R005:

Less than 10 gallons enamel per day;
Less than 70 gallons of varnish per day;
Less than 50 gallons of glaze per day;
Less than 100 gallons of toner per day; and
Less than 10 gallons of cleanup material per day.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section C.2.

F. **Miscellaneous Requirements**

1. The following sections of this permit are federally enforceable: A, B, C.1-C.8,C.10-C.12, D, and E.