



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center  
122 S. Front Street  
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049  
Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL  
DARKE COUNTY  
Application No: 08-04740  
Fac ID: 0819020243**

**CERTIFIED MAIL**

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 5/30/2006**

Creative Cabinet Systems Inc  
David Starr  
1 Pop Rite Dr  
Arcanum, OH 453041202

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

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

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

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

CC: USEPA

RAPCA



**Permit To Install  
Terms and Conditions**

**Issue Date: 5/30/2006  
Effective Date: 5/30/2006**

**FINAL PERMIT TO INSTALL 08-04740**

Application Number: 08-04740  
Facility ID: 0819020243  
Permit Fee: **\$1400**  
Name of Facility: Creative Cabinet Systems Inc  
Person to Contact: David Starr  
Address: 1 Pop Rite Dr  
Arcanum, OH 453041202

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1 Pop Rite Dr  
Arcanum, Ohio**

Description of proposed emissions unit(s):  
**chapter 31 modification replacing pti 08-04616 issued 8/12/04 to increase coating useage in K001-K003.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## **Part I - GENERAL TERMS AND CONDITIONS**

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

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

#### **3. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this

permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

#### 14. Construction Compliance Certification

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

#### 15. Fees

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

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

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
<b>Organic compounds</b>	<b>37.8</b>
<b>Volatile organic compounds</b>	<b>25</b>
<b>Individual HAP</b>	<b>9.9</b>
<b>Combined HAP</b>	<b>24.9</b>

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Clean up solvent use and recovery	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions from this emissions unit shall not exceed 58.8 lbs/day and 10.6 tons per year (TPY).
		See A.2.a.
		The volatile organic compound (VOC) emissions 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.b.
	OAC rule 3745-21-07(A)(2)(c)	
	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.c.
	40 CFR Part 63, Subpart JJ	

**2. Additional Terms and Conditions**

- 2.a** The 58.8 lbs OC/day limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** 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.
- 2.c** 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 month for the purpose of determining annual OC emissions from this emissions unit.
  - a. The name and identification of clean up material employed.
  - b. The volume, in gallons, of each clean up material employed.
  - c. The OC content of each clean up material employed, in pounds of OC per gallon.
  - d. The volume, in gallons, of clean up material recovered for disposal as liquid waste.
  - e. The total OC emissions from all coating, thinner, adhesive and clean up materials, in pounds or tons per month, for this emission unit (the sum of (b x c) - (d x c)).
  - f. The sum of the monthly OC emissions rates calculated (in e) for each calendar year.

2. 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 x c for all coating, thinner, adhesive and clean up material minus the sum of c x 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).
  
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 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 x c for each coating, thinner, adhesive and clean up material minus the sum of c x 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 x g for each coating, thinner, adhesive and clean up material minus the sum of d x 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).
4. The permit to install for this emissions unit (P001) 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/m<sup>3</sup>): 5,000 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 0.72 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 92.3 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 119 ug/m<sup>3</sup>

Pollutant: mineral spirits

TLV (mg/m<sup>3</sup>): 572,597 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.5 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,848 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 13,633 ug/m<sup>3</sup>

Pollutant: N-butyl acetate

TLV (mg/m<sup>3</sup>): 712,638 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,818 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 16,968 ug/m<sup>3</sup>

Pollutant: 1-methoxy-2-propanol

TLV (mg/m<sup>3</sup>): 368,589 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 17.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2,202 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 8,776 ug/m<sup>3</sup>

Pollutant: N-butanol (lowest MAGLC of the remaining air toxics emitted)  
TLV (mg/m<sup>3</sup>): 60,630 mg/m<sup>3</sup>  
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/m<sup>3</sup>): 1,428 ug/m<sup>3</sup> (isopropanol, the highest ground level concentration of the remaining air toxics emitted.)  
MAGLC (ug/m<sup>3</sup>): 1,444 ug/m<sup>3</sup> (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.).
5. 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.
6. 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 exceedances of the rolling 12-month 25 TPY of VOC emissions limitation from emissions units P001, R001, R002 and R003.
  - b. All exceedances of the rolling 12-month 9.9 TPY of individual HAP emissions limitation from emissions units P001, R001, R002 and R003.
  - c. All exceedances of the rolling 12-month 24.9 TPY of combined HAP emissions limitation from emissions units P001, R001, R002 and R003.

The quarterly deviation (excursion) reports shall be submitted as specified in section A.2.b of the General Terms and Conditions.

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.

#### **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:

- a. Emission Limitation -  
The OC emissions from this emissions unit shall not exceed 58.8 lbs/day.  
  
Applicable Compliance Method -  
Compliance shall be based upon the maximum daily clean up solvent usage rate of 8.5 gallons/day, multiplied by its maximum OC content of 6.92 pounds per gallon, for each day.
  
- b. Emission Limitation -  
The OC emissions from this emissions unit shall not exceed 10.6 TPY.  
  
Applicable Compliance Method -  
Compliance shall be based upon record keeping as specified in C.1 and shall be determined by summing the monthly emissions rates, for each calendar year.
  
- c. 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.2 and shall be determined by summing the monthly VOC emissions rates, in tons, on a rolling 12-month basis.
  
- d. 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.3 and shall be determined by summing the monthly individual HAP emissions rates, in tons, on a rolling 12-month basis.
  
- e. 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.3 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 listed in this PTI shall supercede the requirements of for this emissions unit contained in PTI 08-04616 as issued on August 12, 2004. The emissions

unit identification numbers have been changed to R001, R002 and R003 from K001, K002, and K003 respectively to better reflect the applicable regulations they must comply with.

2. The terms and conditions of sections A.1., B.1, C.2. C.3, D.1, E.1.c., E.1.d., and E.1.e., of this PTI are federally enforceable.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R001 - Coating/Staining Booth No. 1	OAC rule 3745-31-05(A)(3)	<p>The organic compound (OC) emissions from this emissions unit shall not exceed 225 lbs/day and 14.3 tons per year, excluding clean up.</p> <p>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.</p> <p>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).</p>
	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)	<p>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.</p>
	40 CFR Part 63, Subpart JJ	See A.2.b.

## **2. Additional Terms and Conditions**

- 2.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.
- 2.b** 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 x 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 x c for all coating, thinner, adhesive and clean up material minus the sum of c x 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 x c for each coating, thinner, adhesive and clean up material minus the sum of c x 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 x g for each coating, thinner, adhesive and clean up material minus the sum of d x 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 (R001) 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/m<sup>3</sup>): 5,000 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 0.72 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 92.3 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 119 ug/m<sup>3</sup>

Pollutant: mineral spirits

TLV (mg/m<sup>3</sup>): 572,597 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.5 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,848 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 13,633 ug/m<sup>3</sup>

Pollutant: N-butyl acetate

TLV (mg/m<sup>3</sup>): 712,638 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,818 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 16,968 ug/m<sup>3</sup>

Pollutant: 1-methoxy-2-propanol

TLV (mg/m<sup>3</sup>): 368,589 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 17.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2,202 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 8,776 ug/m<sup>3</sup>

Pollutant: N-butanol (lowest MAGLC of the remaining air toxics emitted)

TLV (mg/m<sup>3</sup>): 60,630 mg/m<sup>3</sup>

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/m<sup>3</sup>): 1,428 ug/m<sup>3</sup> (isopropanol, the highest ground level concentration of the remaining air toxics emitted.)

MAGLC (ug/m<sup>3</sup>): 1,444 ug/m<sup>3</sup> (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 225 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.

The quarterly deviation (excursion) reports shall be submitted as specified in section A.2.b of the General Terms and Conditions.

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.

## **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:
  - a. **Emission Limitation -**  
The OC emissions from this emissions unit shall not exceed 225 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.
  - b. **Emission Limitation -**  
The OC emissions from this emissions unit shall not exceed 14.3 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.
  - c. **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.
  - d. **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.
  - e. **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 listed in this PTI shall supercede the requirements for this emissions unit contained in PTI 08-04616 as issued on August 12, 2004. The emissions unit identification numbers have been changed to R001, R002 and R003 from K001, K002, and K003 respectively to better reflect the applicable regulations they must comply with.
2. 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 PTI are federally enforceable.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R002 - Coating/staining booth No. 2	OAC rule 3745-31-05(A)(3)	<p>The organic compound (OC) emissions from this emissions unit shall not exceed 79 lbs/day and 9.0 tons per year, excluding clean up.</p> <p>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.</p> <p>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).</p>
	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)	<p>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.</p>
	40 CFR Part 63, Subpart JJ	See A.2.b.

## **2. Additional Terms and Conditions**

- 2.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.
- 2.b** 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 x 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 x c for all coating, thinner, adhesive and clean up material minus the sum of c x 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 x c for each coating, thinner, adhesive and clean up material minus the sum of c x 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 x g for each coating, thinner, adhesive and clean up material minus the sum of d x 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/m<sup>3</sup>): 5,000 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 0.72 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 92.3 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 119 ug/m<sup>3</sup>

Pollutant: mineral spirits

TLV (mg/m<sup>3</sup>): 572,597 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.5 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,848 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 13,633 ug/m<sup>3</sup>

Pollutant: N-butyl acetate

TLV (mg/m<sup>3</sup>): 712,638 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 14.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1,818 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 16,968 ug/m<sup>3</sup>

Pollutant: 1-methoxy-2-propanol

TLV (mg/m<sup>3</sup>): 368,589 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 17.2 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2,202 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 8,776 ug/m<sup>3</sup>

Pollutant: N-butanol (lowest MAGLC of the remaining air toxics emitted)  
TLV (mg/m<sup>3</sup>): 60,630 mg/m<sup>3</sup>  
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/m<sup>3</sup>): 1,428 ug/m<sup>3</sup> (isopropanol, the highest ground level concentration of the remaining air toxics emitted.)  
MAGLC (ug/m<sup>3</sup>): 1,444 ug/m<sup>3</sup> (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.

The quarterly deviation (excursion) reports shall be submitted as specified in section A.2.b of the General Terms and Conditions.

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.

## **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:

a. 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.

b. 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.

c. 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.

d. 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.

e. 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 listed in this PTI shall supercede the requirements for this emissions unit contained in PTI 08-04616 as issued on August 12, 2004. The emissions unit identification numbers have been changed to R001, R002 and R003 from K001, K002, and K003 respectively to better reflect the applicable regulations they must comply with.
2. 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 PTI are federally enforceable.

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R003 - Veneering Operations	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions from this emissions unit shall not exceed 21 lbs/day and 3.83 tons per year, excluding clean up.  See A.2.a
	OAC rule 3745-21-07(A)(2)(c)	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.b.
	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.
	40 CFR Part 63, Subpart JJ	See A.2.c.

**2. Additional Terms and Conditions**

- 2.a** The 21 lbs OC/day limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** 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.
- 2.c** 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 month for the purpose of determining annual OC emissions from this emissions unit.
  - a. The name and identification of each adhesive employed.
  - b. The volume, in gallons, of each adhesive employed.
  - c. The OC content of each adhesive employed, in pounds of OC per gallon.
  - d. The total OC emissions from all adhesive in pounds per month, for this emission unit (the sum of b x c for each adhesive).
  - e. The sum of the monthly OC emissions rates calculated (in d) for each calendar year.
- 2. The permittee shall collect and record the following information each month this 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 x c for all coating, thinner, adhesive and clean up material minus the sum of c x 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).
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 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 x c for each coating, thinner, adhesive and clean up material minus the sum of c x 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 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).
4. The permit to install for this emissions unit (R003) 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/m<sup>3</sup>): 5,000 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 0.72 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 92.3 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 119 ug/m<sup>3</sup>

- 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.).
5. 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.

6. 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 exceedances of the rolling 12-month 25 TPY of VOC emissions limitation from emissions units P001, R001, R002 and R003.
  - b. All exceedances of the rolling 12-month 9.9 TPY of individual HAP emissions limitation from emissions units P001, R001, R002 and R003.
  - c. All exceedances of the rolling 12-month 24.9 TPY of combined HAP emissions limitation from emissions units P001, R001, R002 and R003.
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.

**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:

a. Emission Limitation -  
The OC emissions from this emissions unit shall not exceed 21 lbs/day, excluding clean up.

Applicable Compliance Method -  
Compliance shall be based upon the maximum daily adhesive usage rate of 3 gallons/day, multiplied by its maximum OC content of 7 pounds per gallon, for each day.

b. Emission Limitation -  
The OC emissions from this emissions unit shall not exceed 3.83 TPY.

Applicable Compliance Method -  
Compliance shall be based upon record keeping as specified in C.1 and shall be determined by summing the monthly emissions rates, for each calendar year.

c. 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.2 and shall be determined by summing the monthly VOC emissions rates, in tons, on a rolling 12-month basis.

d. 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.3 and shall be determined by summing the monthly individual HAP emissions rates, in tons, on a rolling 12-month basis.

e. 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.3 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 listed in this PTI shall supercede the requirements for this emissions unit contained in PTI 08-04616 as issued on August 12, 2004. The emissions unit identification numbers have been changed to R001, R002 and R003 from K001, K002, and K003 respectively to better reflect the applicable regulations they must comply with.
2. The terms and conditions of sections A.1., B.1, C.2. C.3, D.1, E.1.c., E.1.d., and E.1.e., of this PTI are federally enforceable.