



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
BUTLER COUNTY  
Application No: 14-04014**

**CERTIFIED MAIL**

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

**DATE: 9/16/2003**

Hamilton Fixture  
Michele Willingham  
3550 Symmes Road  
Hamilton, OH 45015

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

HCDES



FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-04014

Application Number: 14-04014

APS Premise Number: 1409040847

Permit Fee: \$0

Name of Facility: Hamilton Fixture

Person to Contact: Michele Willingham

Address: 3550 Symmes Road  
Hamilton, OH 45015

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**3550 Symmes Road**  
**Hamilton, Ohio**

Description of proposed emissions unit(s):  
**Administrative modification to limit facility wide VOC emissions.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 thirty (30) days after commencing operation of the source(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**

<b><u>Pollutant</u></b>	<b><u>Tons Per Year</u></b>
Volatile Organic Compounds	24.9

**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 - Wood coating line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.f
	OAC rule 3745-21-07(G)(2)	See term A.2.b.
	OAC rule 3745-31-05(A)(3)	See terms A.2.c.thru A.2.e.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).
- 2.b On any day in which a photochemically reactive material (PRM) is employed in emissions units R001, R002, R003, R004 or R005, the volatile organic compound/organic compound (VOC) emissions from each such emissions unit employing a PRM shall not exceed 8 pounds per hour and 40 pounds per day (including cleaning material evaporated).

- 2.c** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the VOC emissions shall not exceed 9.93 pounds per hour and 150.86 pounds per day (including cleaning material evaporated\*) as an average for all emissions units in which no PRM was employed.
- 2.d** The average daily and average hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions ( for the sum of emissions units R001, R002, R003, R004 and R005) by the sum number of days and hours, respectively, of operation of emissions units R001, R002, R003, R004 and R005, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).
- Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.9.
- 2.e** The total VOC emissions (including cleaning material) from emissions units R001, R002, R003, R004 and R005 combined shall not exceed 2.08 tons per month.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

- 1.** None

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

- 2. On any day in which a PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for each such emissions unit for the day in which the PRM is employed:

- a. The company identification for each coating and cleaning, washoff and gluing material employed.
- b. The number of gallons of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds per gallon.
- d. The total VOC emission rate for all coatings and cleaning, washoff and gluing materials, in pounds per day (b x c).
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly VOC emission rate for all coatings and cleaning, washoff and gluing materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the cleaning material information is only for cleaning materials that are determined to be PRMs.]

3. On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for all such emissions units:
  - a. The company identification of each coating and cleaning, washoff and gluing material employed.
  - b. The gallons of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material employed, in pounds per gallon.
  - d. The total VOC emissions from all emissions units not employing a PRM, i.e. the sum of (b)x(c) for each coating and cleaning, washoff and gluing material employed, in pounds per day.
  - e. The total hours of operation for all emissions units not employing a PRM.
  - f. The average hourly VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/(e), in pounds per hour.
  - g. The average daily VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/the number of emissions units not employing a PRM, in pounds per day.

[Note: The coating information in (c) must be for the coatings as applied, including any thinning solvents added at the coating line.]

4. The permittee shall maintain monthly records of the total VOC emissions from emissions units R001, R002, R003, R004 and R005 combined in tons per month.

The monthly VOC emissions shall be determined by the recordkeeping required in term C.6.d.

5. The permittee shall maintain monthly records which contain the following information for the entire facility:

- a. The amount of cleaning solvent in the inventory at the beginning of the month.
- b. The amount of cleaning solvent in the inventory at the end of the month.
- c. The amount of cleaning solvent added to the inventory during the month.
- d. The amount of cleaning solvent collected as waste during the month.
- e. The pounds of VOC in the waste solvent. See C.9.
- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.

6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:

- a. The name and identification number of each coating and cleaning, washoff and gluing material employed.
- b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
- d. The amount of VOC emitted for all coating and cleaning, washoff and gluing materials employed, in pounds per month, (b)x(c). Monthly cleaning solvent emissions are obtained from A.2.d.
- e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.
- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).

- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 calendar months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

- 7. The permit to install for this emissions unit R001 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied 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: Formaldehyde

TLV (ug/m3): 370

Maximum Hourly Emission Rate (lbs/hr): 0.12 combined from R001, R002, R003 and R005

Predicted 1 Hour Maximum Ground-level Concentration (ug/m3): 7.203

Maximum Acceptable Ground-level Concentration (MAGLC) (ug/m3): 8.809

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(VV)(1)(a)(ii), 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 [other than (VV)(1)(a)(ii)], 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 its 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.
- 8.** The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 9.** For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
- a. The weight percent solids.
  - b. The weight percent water.

- c. The density of waste material shipped.
- d. The total gallons of waste material shipped.
- e. The pounds of VOC per gallon.
- f. The VOC credit in pounds VOC per shipment.
- g. Confirmation that the waste was received and will be reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any daily record when a PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual daily VOC emissions for each emissions unit in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall submit quarterly written reports which identify any daily record when no PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 9.93 pounds per hour and/or 150.86 pounds per day average VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual average daily VOC emissions for the emissions units in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

3. The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 2.08 tons per month combined VOC emissions limit for emissions units R001, R002, R003, R004 and R005. The report shall include a copy of each such record along with the actual monthly VOC emissions.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total volatile organic compound emission rate for all coatings and cleaning, washoff and gluing materials employed during the reporting period for emissions units R001, R002, R003, R004 and R005.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

5. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

6. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:
  - a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
  - b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

**E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.3.
4. Compliance with the VOC emission limitation outlined in term A.2.e shall be demonstrated by the required recordkeeping in term C.4.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C.1.-C.6.,C.8., C.9., D., and E.
2. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Average" in Terms A.2.c and C.2 shall mean total daily emissions divided by actual hours of operation in that day. Average hourly or daily emissions shall be calculated by adding the total daily/hourly emissions from emissions units R001, R002, R003, R004 and R005 which did not employ any photochemically reactive material (PRM) on a given day and dividing the sum by the total number of those emissions units.

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

3. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.
4. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washing and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

**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 - Wood coating line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a and A.2.f.
	OAC rule 3745-21-07(G)(2)	See term A.2.b.
	OAC rule 3745-31-05(A)(3)	See terms A.2.c.thru A.2.e.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).
- 2.b On any day in which a photochemically reactive material (PRM) is employed in emissions units R001, R002, R003, R004 or R005, the volatile organic compound/organic compound (VOC) emissions from each such emissions unit employing a PRM shall not exceed 8 pounds per hour and 40 pounds per day (including cleaning material evaporated).

- 2.c** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the VOC emissions shall not exceed 9.93 pounds per hour and 150.86 pounds per day (including cleaning material evaporated\*) as an average for all emissions units in which no PRM was employed.
- 2.d** The average daily and average hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions ( for the sum of emissions units R001, R002, R003, R004 and R005) by the sum number of days and hours, respectively, of operation of emissions units R001, R002, R003, R004 and R005, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).
- Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.9.
- 2.e** The total VOC emissions (including cleaning material) from emissions units R001, R002, R003, R004 and R005 combined shall not exceed 2.08 tons per month.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

- 1.** None

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

2. On any day in which a PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for each such emissions unit for the day in which the PRM is employed:

- a. The company identification for each coating and cleaning, washoff and gluing material employed.
- b. The number of gallons of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds per gallon.
- d. The total VOC emission rate for all coatings and cleaning, washoff and gluing materials, in pounds per day (b x c).
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly VOC emission rate for all coatings and cleaning, washoff and gluing materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the cleaning material information is only for cleaning materials that are determined to be PRMs.]

3. On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for all such emissions units:
  - a. The company identification of each coating and cleaning, washoff and gluing material employed.
  - b. The gallons of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material employed, in pounds per gallon.
  - d. The total VOC emissions from all emissions units not employing a PRM, i.e. the sum of (b)x(c) for each coating and cleaning, washoff and gluing material employed, in pounds per day.
  - e. The total hours of operation for all emissions units not employing a PRM.
  - f. The average hourly VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/(e), in pounds per hour.
  - g. The average daily VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/the number of emissions units not employing a PRM, in pounds per day.

[Note: The coating information in (c) must be for the coatings as applied, including any thinning solvents added at the coating line.]

4. The permittee shall maintain monthly records of the total VOC emissions from emissions units R001, R002, R003, R004 and R005 combined in tons per month.

The monthly VOC emissions shall be determined by the recordkeeping required in term C.6.d.

5. The permittee shall maintain monthly records which contain the following information for the entire facility:

- a. The amount of cleaning solvent in the inventory at the beginning of the month.
- b. The amount of cleaning solvent in the inventory at the end of the month.
- c. The amount of cleaning solvent added to the inventory during the month.
- d. The amount of cleaning solvent collected as waste during the month.
- e. The pounds of VOC in the waste solvent. See C.9.
- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.

6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:

- a. The name and identification number of each coating and cleaning, washoff and gluing material employed.
- b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
- d. The amount of VOC emitted for all coating and cleaning washoff and gluing materials employed, in pounds per month, (b)x(c). Monthly cleaning solvent emissions are obtained from A.2.d.
- e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.
- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).

- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 calendar months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

- 7. The permit to install for this emissions unit R002 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied 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: Formaldehyde

TLV (ug/m3): 370

Maximum Hourly Emission Rate (lbs/hr): 0.12 combined from R001, R002, R003 and R005

Predicted 1 Hour Maximum Ground-level Concentration (ug/m3): 7.203

Maximum Acceptable Ground-level Concentration (MAGLC) (ug/m3): 8.809

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(VV)(1)(a)(ii), 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 [other than (VV)(1)(a)(ii)], 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 its 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.
- 8.** The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 9.** For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
- a. The weight percent solids.
  - b. The weight percent water.
  - c. The density of waste material shipped.
  - d. The total gallons of waste material shipped.
  - e. The pounds of VOC per gallon.
  - f. The VOC credit in pounds VOC per shipment.
  - g. Confirmation that the waste was received and will be reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any daily record when a PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual daily VOC emissions for each emissions unit in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall submit quarterly written reports which identify any daily record when no PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 9.93 pounds per hour and/or 150.86 pounds per day average VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual average daily VOC emissions for the emissions units in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

3. The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 2.08 tons per month combined VOC emissions limit for emissions units R001, R002, R003, R004 and R005. The report shall include a copy of each such record along with the actual monthly VOC emissions.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total volatile organic compound emission rate for all coatings and cleaning, washoff and gluing materials employed during the reporting period for emissions units R001, R002, R003, R004 and R005.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

5. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

6. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:
  - a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
  - b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating ,cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.3.
4. Compliance with the VOC emission limitation outlined in term A.2.e shall be demonstrated by the required recordkeeping in term C.4.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C.1.-C.6.,C.8., C.9., D., and E.
2. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Average" in Terms A.2.c and C.2 shall mean total daily emissions divided by actual hours of operation in that day. Average hourly or daily emissions shall be calculated by adding the total daily/hourly emissions from emissions units R001, R002, R003, R004 and R005 which did not employ any photochemically reactive material (PRM) on a given day and dividing the sum by the total number of those emissions units.

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

3. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.
4. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washing and gluing processes

**Hamilton Fixture**

**PTI Application: 14-04014**

**Modification Issued: 9/16/2003**

**Facility ID: 1409040847**

**Emissions Unit ID: R002**

exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

**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 - Wood coating line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a.and A.2.f
	OAC rule 3745-21-07(G)(2)	See term A.2.b.
	OAC rule 3745-31-05(A)(3)	See terms A.2.c.thru A.2.e.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

- 2.b On any day in which a photochemically reactive material (PRM) is employed in emissions units R001, R002, R003, R004 or R005, the volatile organic compound/organic compound (VOC) emissions from each such emissions unit employing a PRM shall not exceed 8 pounds per hour and 40 pounds per day (including cleaning material evaporated).

- 2.c** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the VOC emissions shall not exceed 9.93 pounds per hour and 150.86 pounds per day (including cleaning material evaporated\*) as an average for all emissions units in which no PRM was employed.
- 2.d** The average daily and average hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions ( for the sum of emissions units R001, R002, R003, R004 and R005) by the sum number of days and hours, respectively, of operation of emissions units R001, R002, R003, R004 and R005, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).
- Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.9.
- 2.e** The total VOC emissions (including cleaning material) from emissions units R001, R002, R003, R004 and R005 combined shall not exceed 2.08 tons per month.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

- 1.** None

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

- 2. On any day in which a PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for each such emissions unit for the day in which the PRM is employed:

- a. The company identification for each coating and cleaning, washoff and gluing material employed.
- b. The number of gallons of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds per gallon.
- d. The total VOC emission rate for all coatings and cleaning, washoff and gluing materials, in pounds per day (b x c).
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly VOC emission rate for all coatings and cleaning, washoff and gluing materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the cleaning material information is only for cleaning materials that are determined to be PRMs.]

3. On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for all such emissions units:
  - a. The company identification of each coating and cleaning, washoff and gluing material employed.
  - b. The gallons of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material employed, in pounds per gallon.
  - d. The total VOC emissions from all emissions units not employing a PRM, i.e. the sum of (b)x(c) for each coating and cleaning, washoff and gluing material employed, in pounds per day.
  - e. The total hours of operation for all emissions units not employing a PRM.
  - f. The average hourly VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/(e), in pounds per hour.
  - g. The average daily VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/the number of emissions units not employing a PRM, in pounds per day.

[Note: The coating information in (c) must be for the coatings as applied, including any thinning solvents added at the coating line.]

4. The permittee shall maintain monthly records of the total VOC emissions from emissions units R001, R002, R003, R004 and R005 combined in tons per month.

The monthly VOC emissions shall be determined by the recordkeeping required in term C.6.d.

5. The permittee shall maintain monthly records which contain the following information for the entire facility:

- a. The amount of cleaning solvent in the inventory at the beginning of the month.
- b. The amount of cleaning solvent in the inventory at the end of the month.
- c. The amount of cleaning solvent added to the inventory during the month.
- d. The amount of cleaning solvent collected as waste during the month.
- e. The pounds of VOC in the waste solvent. See C.9.
- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.

6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:

- a. The name and identification number of each coating and cleaning, washoff and gluing material employed.
- b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
- d. The amount of VOC emitted for all coating and cleaning washoff and gluing materials employed, in pounds per month, (b)x(c). Monthly cleaning solvent emissions are obtained from A.2.d.
- e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.
- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).

- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 calendar months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

- 7. The permit to install for this emissions unit R003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied 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: Formaldehyde

TLV (ug/m3): 370

Maximum Hourly Emission Rate (lbs/hr): 0.12 combined from R001, R002, R003 and R005

Predicted 1 Hour Maximum Ground-level Concentration (ug/m3): 7.203

Maximum Acceptable Ground-level Concentration (MAGLC) (ug/m3): 8.809

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(VV)(1)(a)(ii), 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 [other than (VV)(1)(a)(ii)], 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 its 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.
- 8.** The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 9.** For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
- a. The weight percent solids.
  - b. The weight percent water.
  - c. The density of waste material shipped.
  - d. The total gallons of waste material shipped.
  - e. The pounds of VOC per gallon.
  - f. The VOC credit in pounds VOC per shipment.
  - g. Confirmation that the waste was received and will be reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any daily record when a PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual daily VOC emissions for each emissions unit in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall submit quarterly written reports which identify any daily record when no PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 9.93 pounds per hour and/or 150.86 pounds per day average VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual average daily VOC emissions for the emissions units in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

3. The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 2.08 tons per month combined VOC emissions limit for emissions units R001, R002, R003, R004 and R005. The report shall include a copy of each such record along with the actual monthly VOC emissions.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total volatile organic compound emission rate for all coatings and cleaning, washoff and gluing materials employed during the reporting period for emissions units R001, R002, R003, R004 and R005.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

5. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

6. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:
  - a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
  - b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating ,cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.3.
4. Compliance with the VOC emission limitation outlined in term A.2.e shall be demonstrated by the required recordkeeping in term C.4.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C.1.-C.6.,C.8., C.9., D., and E..
2. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Average" in Terms A.2.c and C.2 shall mean total daily emissions divided by actual hours of operation in that day. Average hourly or daily emissions shall be calculated by adding the total daily/hourly emissions from emissions units R001, R002, R003, R004 and R005 which did not employ any photochemically reactive material (PRM) on a given day and dividing the sum by the total number of those emissions units.

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

3. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.
4. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washing and gluing processes

**Hamilton Fixture**

**PTI Application: 14-04014**

**Modification Issued: 9/16/2003**

**Facility ID: 1409040847**

**Emissions Unit ID: R002**

exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

**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>
R004 - Wood coating line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.f
	OAC rule 3745-21-07(G)(2)	See term A.2.b.
	OAC rule 3745-31-05(A)(3)	See terms A.2.c.thru A.2.e  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).

**2. Additional Terms and Conditions**

**2.a** The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

**2.b** On any day in which a photochemically reactive material (PRM) is employed in emissions units R001, R002, R003, R004 or R005, the volatile organic compound/organic compound (VOC) emissions from each such emissions unit employing a PRM shall not exceed 8 pounds per hour and 40 pounds per day (including cleaning material evaporated).

- 2.c** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the VOC emissions shall not exceed 9.93 pounds per hour and 150.86 pounds per day (including cleaning material evaporated\*) as an average for all emissions units in which no PRM was employed.
- 2.d** The average daily and average hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions ( for the sum of emissions units R001, R002, R003, R004 and R005) by the sum number of days and hours, respectively, of operation of emissions units R001, R002, R003, R004 and R005, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).
- Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.9.
- 2.e** The total VOC emissions (including cleaning material) from emissions units R001, R002, R003, R004 and R005 combined shall not exceed 2.08 tons per month.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

- 1.** The permittee shall not apply any coating which emits formaldehyde from emissions unit R004. This restriction shall not apply to any non-volatile formaldehyde or non-volatile formaldehyde containing compounds.

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

2. On any day in which a PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for each such emissions unit for the day in which the PRM is employed:
  - a. The company identification for each coating and cleaning, washoff and gluing material employed.
  - b. The number of gallons of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds per gallon.
  - d. The total VOC emission rate for all coatings and cleaning, washoff and gluing materials, in pounds per day (b x c).
  - e. The total number of hours the emissions unit was in operation.
  - f. The average hourly VOC emission rate for all coatings and cleaning, washoff and gluing materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the cleaning material information is only for cleaning materials that are determined to be PRMs.]

3. On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for all such emissions units:
  - a. The company identification of each coating and cleaning, washoff and gluing material employed.
  - b. The gallons of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material employed, in pounds per gallon.
  - d. The total VOC emissions from all emissions units not employing a PRM, i.e. the sum of (b)x(c) for each coating and cleaning, washoff and gluing material employed, in pounds per day.
  - e. The total hours of operation for all emissions units not employing a PRM.
  - f. The average hourly VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/(e), in pounds per hour.

- g. The average daily VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/the number of emissions units not employing a PRM, in pounds per day.

[Note: The coating information in (c) must be for the coatings as applied, including any thinning solvents added at the coating line.]

- 4. The permittee shall maintain monthly records of the total VOC emissions from emissions units R001, R002, R003, R004 and R005 combined in tons per month.

The monthly VOC emissions shall be determined by the recordkeeping required in term C.6.d.

- 5. The permittee shall maintain monthly records which contain the following information for the entire facility:

- a. The amount of cleaning solvent in the inventory at the beginning of the month.
- b. The amount of cleaning solvent in the inventory at the end of the month.
- c. The amount of cleaning solvent added to the inventory during the month.
- d. The amount of cleaning solvent collected as waste during the month.
- e. The pounds of VOC in the waste solvent. See C.9.
- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.

- 6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:

- a. The name and identification number of each coating and cleaning, washoff and gluing material employed.
- b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
- d. The amount of VOC emitted for all coating and cleaning, washoff and gluing materials employed, in pounds per month, (b)x(c). Monthly cleaning solvent emissions are obtained from A.2.d.

- e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.
- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).
- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 calendar months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

- 7. The permit to install for this emissions unit R004 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied 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: isopropyl alcohol

TLV (ug/m3): 152,000

Maximum Hourly Emission Rate (lbs/hr): 7.45 combined from R001, R002, R003, R004 and R005

Predicted 1 Hour Maximum Ground-level Concentration (ug/m3): 747.8

Maximum Acceptable Ground-level Concentration (MAGLC) (ug/m3): 3619

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(VV)(1)(a)(ii), 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 [other than (VV)(1)(a)(ii)], 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 its 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.
- 8.** The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 9.** For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
- a. The weight percent solids.
  - b. The weight percent water.

- c. The density of waste material shipped.
- d. The total gallons of waste material shipped.
- e. The pounds of VOC per gallon.
- f. The VOC credit in pounds VOC per shipment.
- g. Confirmation that the waste was received and will be reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any daily record when a PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual daily VOC emissions for each emissions unit in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall submit quarterly written reports which identify any daily record when no PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 9.93 pounds per hour and/or 150.86 pounds per day average VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual average daily VOC emissions for the emissions units in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

3. The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 2.08 tons per month combined VOC emissions limit for emissions units R001, R002, R003, R004 and R005. The report shall include a copy of each such record along with the actual monthly VOC emissions.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total volatile organic compound emission rate for all coatings and cleaning, washoff and gluing materials employed during the reporting period for emissions units R001, R002, R003, R004 and R005.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

5. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

6. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:
  - a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
  - b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60,

Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.3.
4. Compliance with the VOC emission limitation outlined in term A.2.e shall be demonstrated by the required recordkeeping in term C.4.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

## **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C.1.-C.6., C.8., C.9., D., and E..
2. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Average" in Terms A.2.c and C.2 shall mean total daily emissions divided by actual hours of operation in that day. Average hourly or daily emissions shall be calculated by adding the total daily/hourly emissions from emissions units R001, R002, R003, R004 and R005 which did not employ any photochemically reactive material (PRM) on a given day and dividing the sum by the total number of those emissions units.

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

3. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.
4. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washing and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

**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>
R005 - Wood coating line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.f
	OAC rule 3745-21-07(G)(2)	See term A.2.b.
	OAC rule 3745-31-05(A)(3)	See terms A.2.c.thru A.2.e.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).

**2. Additional Terms and Conditions**

**2.a** The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

**2.b** On any day in which a photochemically reactive material (PRM) is employed in emissions units R001, R002, R003, R004 or R005, the volatile organic compound/organic compound (VOC) emissions from each such emissions unit employing a PRM shall not exceed 8 pounds per hour and 40 pounds per day (including cleaning material evaporated).

- 2.c** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the VOC emissions shall not exceed 9.93 pounds per hour and 150.86 pounds per day (including cleaning material evaporated\*) as an average for all emissions units in which no PRM was employed.
- 2.d** The average daily and average hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions ( for the sum of emissions units R001, R002, R003, R004 and R005) by the sum number of days and hours, respectively, of operation of emissions units R001, R002, R003, R004 and R005, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).
- Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.9.
- 2.e** The total VOC emissions (including cleaning material) from emissions units R001, R002, R003, R004 and R005 combined shall not exceed 2.08 tons per month.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

1. None

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

- 2. On any day in which a PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for each such emissions unit for the day in which the PRM is employed:

- a. The company identification for each coating and cleaning, washoff and gluing material employed.
- b. The number of gallons of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds per gallon.
- d. The total VOC emission rate for all coatings and cleaning, washoff and gluing materials, in pounds per day (b x c).
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly VOC emission rate for all coatings and cleaning, washoff and gluing materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the cleaning material information is only for cleaning materials that are determined to be PRMs.]

**3.** On any day in which no PRM is employed in emissions units R001, R002, R003, R004 or R005, the permittee shall maintain the following daily records for all such emissions units:

- a. The company identification of each coating and cleaning, washoff and gluing material employed.
- b. The gallons of each coating and cleaning, washoff and gluing material employed.
- c. The VOC content of each coating and cleaning, washoff and gluing material employed, in pounds per gallon.
- d. The total VOC emissions from all emissions units not employing a PRM, i.e. the sum of (b)x(c) for each coating and cleaning, washoff and gluing material employed, in pounds per day.
- e. The total hours of operation for all emissions units not employing a PRM.
- f. The average hourly VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/(e), in pounds per hour.
- g. The average daily VOC emissions rate for all emissions units not employing a PRM, i.e., (d)/the number of emissions units not employing a PRM, in pounds per day.

[Note: The coating information in (c) must be for the coatings as applied, including any thinning solvents added at the coating line.]

4. The permittee shall maintain monthly records of the total VOC emissions from emissions units R001, R002, R003, R004 and R005 combined in tons per month.

The monthly VOC emissions shall be determined by the recordkeeping required in term C.6.d.

5. The permittee shall maintain monthly records which contain the following information for the entire facility:

- a. The amount of cleaning solvent in the inventory at the beginning of the month.

- b. The amount of cleaning solvent in the inventory at the end of the month.

- c. The amount of cleaning solvent added to the inventory during the month.

- d. The amount of cleaning solvent collected as waste during the month.

- e. The pounds of VOC in the waste solvent. See C.9.

- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.

6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:

- a. The name and identification number of each coating, cleaning, washoff and gluing material employed.

- b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.

- c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.

- d. The amount of VOC emitted for all coating and cleaning, washoff and gluing materials employed, in pounds per month, (b)x(c). Monthly cleaning solvent emissions are obtained from A.2.d.

- e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.

- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).

- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 calendar months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

7. The permit to install for this emissions unit R005 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied 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: Formaldehyde

TLV (ug/m3): 370

Maximum Hourly Emission Rate (lbs/hr): 0.12 combined from R001, R002, R003 and R005

Predicted 1 Hour Maximum Ground-level Concentration (ug/m3): 7.203

Maximum Acceptable Ground-level Concentration (MAGLC) (ug/m3): 8.809

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(VV)(1)(a)(ii), 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 [other than (VV)(1)(a)(ii)], 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 its 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.
- 8.** The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 9.** For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
- a. The weight percent solids.
  - b. The weight percent water.
  - c. The density of waste material shipped.
  - d. The total gallons of waste material shipped.
  - e. The pounds of VOC per gallon.
  - f. The VOC credit in pounds VOC per shipment.
  - g. Confirmation that the waste was received and will be reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

- 1.** The permittee shall submit quarterly written reports which identify any daily record when a PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual daily VOC emissions for each emissions unit in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

- 2.** The permittee shall submit quarterly written reports which identify any daily record when no PRM is employed in emissions units R001, R002, R003, R004 or R005 which shows an exceedance of the 9.93 pounds per hour and/or 150.86 pounds per day average VOC emissions limits. The report shall include a copy of each such record along with the actual average hourly VOC emissions rate and the actual average daily VOC emissions for the emissions units in which the VOC emissions limits were exceeded.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

- 3.** The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 2.08 tons per month combined VOC emissions limit for emissions units R001, R002, R003, R004 and R005. The report shall include a copy of each such record along with the actual monthly VOC emissions.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the

previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total volatile organic compound emission rate for all coatings and cleaning, washoff, and gluing materials employed during the reporting period for emissions units R001, R002, R003, R004 and R005.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months ( October through December, January through March, April through June and July through September, respectively) .

5. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

6. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:

- a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .

- b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating ,cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.3.
4. Compliance with the VOC emission limitation outlined in term A.2.e shall be demonstrated by the required recordkeeping in term C.4.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C.1.-C.6.,C.8., C.9., D., and E..
2. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Average" in Terms A.2.c and C.2 shall mean total daily emissions divided by actual hours of operation in that day. Average hourly or daily emissions shall be calculated by adding the total daily/hourly emissions from emissions units R001, R002, R003, R004 and R005 which did not employ any photochemically reactive material (PRM) on a given day and dividing the sum by the total number of those emissions units.

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

3. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.

4. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washing and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

**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>
R006 - Wood coating line and associated cleaning, washoff and gluing operations and metal parts coating line	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.f
	OAC rule 3745-21-07(G)(2)	See term A.2.b
	OAC rule 3745-21-09(U)(2)(f)	See term A.2.c
	OAC rule 3745-31-05(A)(3)	See terms A.2.d and A.2.e
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2), 3745-21-09(U)(2)(f) and 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total allowable volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY, based on a rolling, 12-month summation. The 24.9 TPY rolling, 12-month summation includes emissions from metal coating. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

- 2.b** The VOC emissions from emissions unit R006, when coating wood products, shall not exceed 8 pounds per hour and 40 pounds per day.
- 2.c** The VOC emissions from emissions unit R006, when coating metal products, shall not exceed 75 pounds per day.
- 2.d** The annual VOC emissions (including cleaning evaporated) from emissions unit R006 shall not exceed 0.20 ton per month and 2.4 tons per year for wood products and metal products.
- 2.e** The daily and hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions by the number of days and hours, respectively, of operation of emissions unit R006, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).  
  
Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.8.
- 2.f** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.g** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emissions limitations and compliance with the air toxics policy.

**B. Operational Restrictions**

- 1. None

**C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

- 2. The permittee shall maintain the following daily records for emissions unit R006:
  - a. The company identification for each coating and cleaning material applied.

- b. The number of gallons of each coating applied and cleaning material evaporated for wood products.
- c. The number of gallons of each coating applied and cleaning material evaporated for metal products.
- d. The organic compound content of each coating and cleaning material, in pounds per gallon.
- e. The organic compound emission rate for each coating and cleaning material, in pounds per day, for wood products.
- f. The sum total organic compound emission rate for all coatings and cleaning material in pounds per day, for wood products.
- g. The total number of hours the coatings and cleaning material were applied in the operation for wood products.
- h. The average pounds per hour organic compound emission rate for wood products which results from dividing (g) above by (h) above.
- i. The organic compound emission rate for each coating and cleaning material, in pounds per day, for metal products.
- j. The sum total organic compound emission rate for all coatings and cleaning material in pounds per day, for metal products.

[Note: The coating information required in (b) through (g), (h), and (i) must be for the coatings as applied, including any thinning solvents added at the coating line.

- 3. The permittee shall maintain monthly records of the VOC emissions for wood and metal products.
- 4. The permittee shall maintain monthly records which contain the following information for the entire facility:
  - a. The amount of cleaning solvent in the inventory at the beginning of the month.
  - b. The amount of cleaning solvent in the inventory at the end of the month.
  - c. The amount of cleaning solvent added to the inventory during the month.
  - d. The amount of cleaning solvent collected as waste during the month.
  - e. The pounds of VOC in the waste solvent. See C.8.

- f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.e.
5. At the end of each calendar month, the permittee shall calculate the daily and hourly emissions from cleaning material as described in term A.2.e. The permittee would then re-calculate the daily and hourly organic compound emissions rate for each day of the month as described in term C.2.
6. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:
- a. The name and identification number of each coating and cleaning, washoff and gluing material employed.
  - b. The volume, in gallons, of each coating and cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating and cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
  - d. The amount of VOC emitted for all coating and cleaning, washoff and gluing materials employed, in pounds per month.
  - e. The rolling 12-month\* usage for coating and cleaning, washoff and gluing materials, in gallons.
  - f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).
  - g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

7. The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
8. For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:

- a. The weight percent solids.
- b. The weight percent water.
- c. The density of waste material shipped.
- d. The total gallons of waste material shipped.
- e. The pounds of VOC per gallon.
- f. The VOC credit in pounds VOC per shipment.
- g. Confirmation that the waste is reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any daily record which shows an exceedance of the 8 pounds per hour and/or 40 pounds per day VOC emissions limits when coating wood products. The report shall include a copy of each such record along with the actual hourly VOC emissions rate and/or the actual daily VOC emissions as well as any corrective actions taken to address the exceedance.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall submit quarterly written reports which identify any daily record which shows an exceedance of the 75 pounds per day VOC emissions when coating metal products. The report shall include a copy of each such record along with the actual VOC emissions when coating metal products as well as any corrective action taken to address the exceedance.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

If no exceedances occurred during the reporting period, then a report is required stating so.

3. The permittee shall submit quarterly written reports which identify any monthly record which shows an exceedance of the 0.2 ton per month VOC emission limit. The report shall include a copy of each such record along with the actual VOC emissions when coating metal products as well as any corrective action taken to address the exceedance.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

If no exceedances occurred during the reporting period, then a report is required stating so.

4. The permittee shall submit quarterly written reports which identify the total organic compound emission rate for all coatings and cleaning material employed during the reporting period for emissions unit R006.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

5. The permittee shall submit annual reports which specify the following for each month:
  - a. The total rolling, 12-month summation VOC emissions from emissions units R001 through R008.
  - b. The individual HAP emissions from the facility, and the combined HAP emissions from the facility.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

6. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

7. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:

a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .

b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

**E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating ,cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party (i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitations outlined in term A.2.c shall be demonstrated by the required recordkeeping in term C.2.
4. Compliance with the VOC emission limitations outlined in term A.2.d shall be demonstrated by the required recordkeeping in term C.3.
5. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.6.
6. Compliance with the HAP limitations outlined in term A.2.f shall be demonstrated by the record keeping in term C.1.

**F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D., and E.
2. This Federally Enforceable Permit limits the potential emissions of organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC

emissions from the wood finishing processes and associated cleaning, washing and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days.

3. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Employed" shall mean the use of coatings and/or cleanup solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

4. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.

**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>
R007 - Wood Coating Line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.c
	OAC rule 3745-21-07(G)(2)	Exempt, See term B.1.
	OAC rule 3745-31-05(A)(3)	See A.2.b. thru A.2.d.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).
- 2.b The VOC emissions shall not exceed 39.68 pounds per day (including cleaning material evaporated), 0.058 ton per month (including cleaning material evaporated) and 0.7 ton per year (including cleaning material evaporated).
- 2.c The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.

- 2.d** The daily and hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions by the number of days and hours, respectively, of operation of emissions unit R007, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows:  $\text{Monthly emissions of cleaning solvent (pounds)} = (\text{cleaning solvent added to the inventory during the month}) + (\text{cleaning solvent inventory at the beginning of the month}) - (\text{cleaning solvent inventory at the end of the month}) - (\text{cleaning solvent collected as waste in the month})$ .

Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.8.

## **B. Operational Restrictions**

1. The use of photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) is prohibited in this emissions unit.

## **C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
  - f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
  - g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];

- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

- 2. The permittee shall maintain the following daily records for emissions unit R007:
  - a. The company identification for each gluing material applied and organic cleaning material evaporated.
  - b. The number of gallons of each gluing material applied.
  - c. The number of gallons of each organic cleaning material evaporated.
  - d. The organic compound content for all gluing materials and organic cleaning materials employed in pounds per gallon.
  - e. The total organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in pounds per day.
  - f. The total monthly organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in pounds per month ( the sum of all the daily organic compound emissions from e. for the calendar month.)

- g. The total annual organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in tons per year ( the sum of all the monthly organic compound emissions from f. for the calendar year.)
3. The permittee shall maintain monthly records which contain the following information:
- a. The amount of cleaning solvent in the inventory at the beginning of the month.
  - b. The amount of cleaning solvent in the inventory at the end of the month.
  - c. The amount of cleaning solvent added to the inventory during the month.
  - d. The amount of cleaning solvent collected as waste during the month.
  - e. The pounds of VOC in the waste solvent. See C.8.
  - f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.
4. At the end of each calendar month, the permittee shall calculate the daily emissions from cleaning material as described in term A.2.d The permittee would then re-calculate the daily and hourly organic compound emissions rate for each day of the month as described in term C.2.
5. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:
- a. The name and identification number of each coating, cleaning, washoff and gluing material employed.
  - b. The volume, in gallons, of each coating, cleaning, washoff and gluing material employed.
  - c. The VOC content of each coating, cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
  - d. The amount of VOC emitted for all coating, cleaning, washoff and gluing materials employed, in pounds per month.
  - e. The rolling 12-month\* usage for coating, cleaning, washoff and gluing materials, in gallons.
  - f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).
  - g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

6. The permittee shall collect and record the following information for each month:
  - a. The company identification of each liquid organic material employed in this emissions unit.
  - b. A record of each liquid organic material employed in this emissions unit indicating, whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C)(5).
7. The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
8. For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
  - a. The weight percent solids.
  - b. The weight percent water.
  - c. The density of waste material shipped.
  - d. The total gallons of waste material shipped.
  - e. The pounds of VOC per gallon.
  - f. The VOC credit in pounds VOC per shipment.
  - g. Confirmation that the waste is reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent recycler using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any record which shows an exceedance of the daily, monthly or annual VOC emissions limitation. The report shall include a copy of each such record along with the actual VOC emissions as well as any corrective action taken to address the exceedance.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall notify the Director (the Hamilton County Department of Environmental Services) in writing identifying each day during which any photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
3. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit. 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.

4. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:
  - a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
  - b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.5.
4. Compliance with the HAP limitations outlined in term A.2.c shall be demonstrated by the record keeping in term C.1.

## **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D., and E.
2. This federally enforceable permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washoff and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days. See term D.4.
3. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

4. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
  
5. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.

**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>
R008 - Wood Coating Line and associated cleaning, washoff and gluing operations	OAC rule 3745-31-05(D)	See terms A.2.a. and A.2.c
	OAC rule 3745-21-07(G)(2)	Exempt, See term B.1.
	OAC rule 3745-31-05(A)(3)	See terms A.2.b. and A.2.d.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a The total volatile organic compound (VOC) emissions from all the wood finishing processes and associated cleaning, washoff and gluing processes located at this facility shall not exceed 24.9 TPY based on a rolling, 12-month summation. "Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks and temporary protective coatings. "Cleaning material" means organic solvent used to remove coating materials from equipment used in wood furniture manufacturing operations. "Washoff material" means organic solvent used to remove coating from a substrate. "Gluing material" means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. "Volatile organic compound" means any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

- 2.b** The VOC emissions shall not exceed 39.68 pounds per day (including cleaning material evaporated), 0.058 ton per month (including cleaning material evaporated) and 0.7 ton per year (including cleaning material evaporated).
- 2.c** The allowable emissions of Hazardous Air Pollutants (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, based on a rolling, 12-month summation.
- 2.d** The daily and hourly emissions of cleaning material shall be from evaporation loss of cleaning material, which may be calculated by dividing the monthly cleaning material emissions by the number of days and hours, respectively, of operation of emissions unit R008, provided that the facility may utilize a loss factor for anticipated cleaning material application at the beginning of each month in order to set aside an amount determined by the facility to reasonably prevent an exceedance of any daily or hourly emission limit ( the loss factor is based on the previous months data). The monthly cleaning material emissions shall be based upon a monthly mass balance calculated as follows: Monthly emissions of cleaning solvent (pounds) = (cleaning solvent added to the inventory during the month) + (cleaning solvent inventory at the beginning of the month) - (cleaning solvent inventory at the end of the month) - (cleaning solvent collected as waste in the month).

Cleaning solvent collected as waste and sent off-site is recovered by the recycler. See term C.8.

## **B. Operational Restrictions**

- 1. The use of photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) is prohibited in this emissions unit.

## **C. Monitoring and/or Recordkeeping 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 cleaning, washoff and gluing material employed;
- f. The individual HAP content for each HAP of each cleaning, washoff and gluing material, in pounds of individual HAP per gallon of cleaning material, washoff and gluing material as applied;
- g. The total combined HAP content of each cleaning, washoff and gluing material, in pounds of combined HAPs per gallon of cleaning, washoff and gluing material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleaning, washoff and gluing material employed;
- i. The total individual HAP emissions for each HAP from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- j. The total combined HAP emissions from all coatings and cleaning, washoff and gluing materials 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 cleaning, washoff and gluing material];
- k. The updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
- l. The updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Monthly records shall be completed within 15 days following the end of each calendar month.

\* 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.

2. The permittee shall maintain the following daily records for emissions unit R008:
  - a. The company identification for each gluing material applied and organic cleaning material evaporated.
  - b. The number of gallons of each gluing material applied.
  - c. The number of gallons of each organic cleaning material evaporated.
  - d. The organic compound content for all gluing materials and organic cleaning materials employed in pounds per gallon.

- e. The total organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in pounds per day.
  - f. The total monthly organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in pounds per month ( the sum of all the daily organic compound emissions from e. for the calendar month.)
  - g. The total annual organic compound emission rate for all gluing materials applied and organic cleaning materials evaporated in tons per year ( the sum of all the monthly organic compound emissions from f. for the calendar year.)
3. The permittee shall maintain monthly records which contain the following information:
    - a. The amount of cleaning solvent in the inventory at the beginning of the month.
    - b. The amount of cleaning solvent in the inventory at the end of the month.
    - c. The amount of cleaning solvent added to the inventory during the month.
    - d. The amount of cleaning solvent collected as waste during the month.
    - e. The pounds of VOC in the waste solvent. See C.8.
    - f. The average daily and average hourly emissions from cleaning solvent as described in term A.2.d.
  4. At the end of each calendar month, the permittee shall calculate the daily emissions from cleaning material as described in term A.2.d The permittee would then re-calculate the daily and hourly organic compound emissions rate for each day of the month as described in term C.2.
  5. The permittee shall collect and record the following information each month for emissions units R001, R002, R003, R004, R005, R006, R007 and R008 for the purpose of demonstrating compliance with the annual VOC emission rate of 24.9 TPY VOC combined, based on a rolling 12-month summation:
    - a. The name and identification number of each coating, cleaning, washoff and gluing material employed.
    - b. The volume, in gallons, of each coating, cleaning, washoff and gluing material employed.
    - c. The VOC content of each coating, cleaning, washoff and gluing material, in pounds of VOC per gallon, as applied.
    - d. The amount of VOC emitted for all coating, cleaning, washoff and gluing materials employed, in pounds per month.

- e. The rolling 12-month\* usage for coating, cleaning, washoff and gluing materials, in gallons.
- f. The rolling 12-month\* VOC emission rate in tons per year ( in tons, rounded off to one decimal place).
- g. Monthly records shall be completed within 15 days following the end of each calendar month.

\*A rolling 12-month period includes the previous set of 12 months.

The records shall be maintained for five years, and upon request the permittee shall submit such records to the appropriate Ohio EPA District Office or local air agency.

- 6. The permittee shall collect and record the following information for each month:
  - a. The company identification of each liquid organic material employed in this emissions unit.
  - b. A record of each liquid organic material employed in this emissions unit indicating, whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C)(5).
- 7. The permittee shall maintain for this facility all purchase orders and invoices of VOC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
- 8. For each shipment of waste cleaning solvent sent to a solvent recycler, the permittee must obtain the following information:
  - a. The weight percent solids.
  - b. The weight percent water.
  - c. The density of waste material shipped.
  - d. The total gallons of waste material shipped.
  - e. The pounds of VOC per gallon.
  - f. The VOC credit in pounds VOC per shipment.
  - g. Confirmation that the waste is reclaimed.

The permittee shall ensure that the pounds VOC per gallon, weight percent solids, weight percent water, and density of waste material are calculated by the solvent reclaimer using Method 24 in Appendix A, 40 CFR Part 60.

The permittee shall maintain at its plant copies of this information for five years after each shipment.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly written reports which identify any record which shows an exceedance of the daily, monthly or annual VOC emissions limitation VOC emissions limitation. The report shall include a copy of each such record along with the actual VOC emissions as well as any corrective action taken to address the exceedance.

The reports shall be submitted to the Director (the Hamilton County Department of Environmental Services) by February 15, May 15, August 15, and November 15 of each year and shall cover the previous three calendar months (October through December, January through March, April through June and July through September, respectively).

If no exceedances occurred during the reporting period, then a report is required stating so.

2. The permittee shall notify the Director (the Hamilton County Department of Environmental Services) in writing identifying each day during which any photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
3. The permittee shall notify the the Director (the appropriate Ohio EPA field office) of any exceedance of the HAP emissions limitations set forth in this Permit to Operate. 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.

4. If the facility has a rolling 12 month record that exceeds the 24.9 tons of VOC identified in term A.2.a, the permittee shall submit the following:

- a. Within 30 days after the end of that rolling 12-month period in which the exceedance occurred, a notification to the appropriate Ohio EPA District Office or local air agency that the VOC emission limit was exceeded .
- b. Exceeding the 24.9 TPY VOC limit is a violation for each day of the last month of each 12 month period in which the 24.9 TPY limit is exceeded regardless of whether a compliance plan is submitted.

## **E. Testing Requirements**

1. OAC rule 3745-21-10(B) shall be used to determine the VOC contents of the coatings, cleaning, washoff and gluing materials employed in this emissions unit. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating ,cleaning, washoff or gluing material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for the coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

Method 24 or 24A can be performed by the permittee or other party ( i.e., the permittee's coating supplier).

2. Compliance with the VOC emission limitations outlined in term A.2.b shall be demonstrated by the required recordkeeping in term C.2.
3. Compliance with the VOC emission limitation outlined in term A.2.a shall be demonstrated by the required recordkeeping in term C.5.
4. Compliance with the HAP limitations outlined in term A.2.c shall be demonstrated by the record keeping in term C.1.

## **F. Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A., B., C., D., and E.
2. This federally enforceable permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes and associated cleaning, washoff and gluing processes located at this facility to no more than 24.9 TPY during any rolling 12-month period. Should VOC emissions from the wood finishing processes and associated cleaning, washoff and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Hamilton County Department of Environmental Services within 30 days. See term D.4.
3. Except as otherwise defined in the terms A thru E, the following terms have the following meanings:

"Employed" shall mean the use of coatings and/or cleaning solvent in a manner which contributes directly to emissions, but shall not include such use which is a part of a recycle or reuse process or procedure, except for actual emissions.

"PRM" shall mean any photochemically reactive material or substance containing a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

"Volatile organic compound" shall mean any volatile organic compound as defined in OAC rule 3745-21-01(B)(6).

4. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
5. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements contained in permit to install 14-4014 as issued on December 17, 1997.

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions

CITY/TWP Hamilton

SIC CODE 3993

SCC CODE 3-07-020-02

EMISSIONS UNIT ID R001

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	nonattainment	151 lbs/day	2.0	151 lbs/day	4.99
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, IPA

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

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FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

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CITY/TWP Hamilton

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**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions

CITY/TWP Hamilton

SIC CODE 3993

SCC CODE 3-07-020-02

EMISSIONS UNIT ID R002

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	non-attainment	151 lb/day	2.0	151 lbs/day	4.99
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, IPA

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

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FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

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CITY/TWP Hamilton

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**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions

CITY/TWP Hamilton

SIC CODE 3993

SCC CODE 3-07-020-02

EMISSIONS UNIT ID R003

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	nonattainment	151 lbs/day	2.0	151 lbs/day	4.99
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ \_\_\_\_\_

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES \_\_\_\_\_ NO \_\_\_\_\_

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, IPA

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

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FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

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CITY/TWP Hamilton

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**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions

CITY/TWP Hamilton

SIC CODE 3993

SCC CODE 3-07-020-02

EMISSIONS UNIT ID R004

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	nonattainment	151 lbs/day	2.0	151 lbs/day	4.99
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: Isopropyl Alcohol

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

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FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

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CITY/TWP Hamilton

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**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions

CITY/TWP Hamilton

SIC CODE 3993

SCC CODE 3-07-020-02

EMISSIONS UNIT ID R005

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	nonattainment	151 lbs/day	2.0	151 lbs/day	4.99
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: Formaldehyde, IPA

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

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FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

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CITY/TWP Hamilton

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**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit facility wide VOC emissions CITY/TWP Hamilton

SIC CODE 3993 SCC CODE 3-07-020-02 EMISSIONS UNIT ID R006

EMISSIONS UNIT DESCRIPTION Wood coating line and associated cleaning, washoff and gluing operations and metal parts coating line

DATE INSTALLED June 1996

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM <sub>10</sub>					
Sulfur Dioxide					
Organic Compounds	nonattainment	75 lbs/day	0.9	75 lbs/day	2.4
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? \_\_\_\_\_ NESHAP? \_\_\_\_\_ PSD? \_\_\_\_\_ OFFSET POLICY? \_\_\_\_\_

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

BAT is satisfied by usage and emission limits for all emission units

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? no

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to containinants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? \_\_\_\_\_ YES x NO \_\_\_\_\_

**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

CITY/TWP Hamilton

IDENTIFY THE AIR CONTAMINANTS: na



**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

CITY/TWP Hamilton

IDENTIFY THE AIR CONTAMINANTS: na



**NEW SOURCE REVIEW FORM B**

PTI Number: 14-04014

Facility ID: 1409040847

FACILITY NAME Hamilton Fixture

FACILITY DESCRIPTION Administrative modification to limit  
facility wide VOC emissions

CITY/TWP Hamilton

IDENTIFY THE AIR CONTAMINANTS: na

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