



State of Ohio Environmental Protection Agency

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**RE: FINAL PERMIT TO INSTALL MODIFICATION
BUTLER COUNTY
Application No: 14-05443**

CERTIFIED MAIL

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

DATE: 9/9/2003

GRK Manufacturing Company
Eric Roeseler
1200 Dayton Street
Hamilton, OH 45011-4220

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 14-05443

Application Number: 14-05443

APS Premise Number: 1409040302

Permit Fee: **\$0**

Name of Facility: GRK Manufacturing Company

Person to Contact: Eric Roeseler

Address: 1200 Dayton Street
Hamilton, OH 450114220

Location of proposed air contaminant source(s) [emissions unit(s)]:

**1200 Dayton Street
Hamilton, Ohio**

Description of proposed emissions unit(s):

Modification to six existing paint spray booths.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	24.9
Single HAPs	9.9
Combined HAPs	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>
R006 - Wood Coating Line 1 with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	See term A.2.a
	OAC rule 3745-31-05(D)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D), OAC rule 3745-21-07(G)(2) and OAC rule 3745-21-09(U)(2)(e)(ii)
	OAC rule 3745-21-07(G)(2)	24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See terms A.2.b, A.2.c, and B.1.
		When coating wood or miscellaneous metal parts, 8 lbs VOC/hr, 40 lbs VOC/day
		See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.

- 2.b** 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.
- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.

B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
- 2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.

C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information for each day for the coating operation:

 - a. The company identification for each coating and cleanup material employed.
 - b. The number of gallons of each coating and cleanup material employed.
 - c. The volatile organic compound content of each coating and cleanup material, in pounds per gallon.

- d. The total volatile organic compound emission rate for all coatings and cleanup materials, in pounds per day [the sum of (b x c) for each coating and cleanup material employed].
- e. The total number of hours the emissions unit was in operation.
- f. The average hourly volatile organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definition of “photochemically reactive material” is based upon OAC rule 3745-21-01(C)(5).]

- g. The total volume, in gallons, of all coatings employed for metal parts.
2. The permittee shall collect and record the following information each month for the entire facility:
- a. The name and identification number of each coating, employed;
 - b. The individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
 - c. The total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];
 - d. The number of gallons of each coating employed;
 - e. The name and identification of each cleanup material employed;
 - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
 - h. The number of gallons of each cleanup material employed;
 - i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in tons per month and tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];

- j. The total combined HAP usage** from all coatings and cleanup materials employed, in tons per month and tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

- 3. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:
 - a. The name and identification number of each coating, cleaning, washoff and gluing material employed. "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 and miscellaneous metal parts coating 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.
 - 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 (b x c).
 - 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).
- *A rolling, 12-month period includes the previous set of 12 calendar months.
- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.

4. The permit to install for this emissions unit R006 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene

TLV (ug/m³): 188,400

Maximum Hourly Emission Rate (lbs/hr): 1.62

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 364

MAGLC (ug/m³): 4486

Pollutant: Methanol

TLV (ug/m³): 262,000

Maximum Hourly Emission Rate (lbs/hr): 8.55

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m³): 1922

MAGLC (ug/m³): 6238

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air 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.
5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous

calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.

3. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
4. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
5. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
6. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.

7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
8. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

8 lbs VOC/hr, 40 lbs VOC/day for coatings and cleanup materials for woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance with the hourly and daily volatile organic compound emission limitations shall be based upon the record keeping requirements specified in term C.1 of this permit.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.3. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.1. of this permit.

4. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

VOC content (lbs/gallon) * material usage rate (gallons) = pounds of VOC

5. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.2.
6. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.3.
7. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

F. Miscellaneous Requirements

1. 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.6
2. The following terms and conditions of this permit are federally enforceable: A., B, C.1-C.3, C.5, D, and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-02777 issued November 25, 1992 and 14-03882 issued November 14, 1996 for this emissions unit.

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 2 with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	222 lbs VOC/day See terms A.2.a, A.2.e, and A.2.f The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-09(U)(2)(e)(ii).
	OAC rule 3745-31-05(D)	24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation. See terms A.2.b, A.2.c, and B.1
	OAC rule 3745-21-07(G)(2)	Exempt. See Term B.3.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.

- 2.b** 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.
- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.
- 2.e** The daily emission limitation(s) outlined in this permit is based upon the maximum daily production/application rate at 30 gallons per day for woodfinishing operations. Therefore, no daily records are required.
- 2.f** The use of methanol based stains is prohibited in emissions unit R007.

B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
- 2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.
- 3. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

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 cleanup material employed;
 - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
 - h. The number of gallons of each cleanup material employed;
 - i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
 - j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

2. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:

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

employed. "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 and miscellaneous metal parts coating 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.

- 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 (b x c).
 - 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).
- *A rolling, 12-month period includes the previous set of 12 calendar months.
- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.

- 3. The permit to install for this emissions unit R007 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene

TLV (ug/m3): 188,400

Maximum Hourly Emission Rate (lbs/hr): 8.307

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 2043
MAGLC (ug/m3): 4486

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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. 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.
5. The permittee shall collect and record the following information each month:
 - a. the company identification of each liquid organic material employed in this emissions unit; and
 - 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).
6. The permittee shall collect and record the following information each day for the coating line when coating metal parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all coatings employed.

D. Reporting Requirements

1. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
3. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
5. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.
6. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] was employed in this emission 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.
7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

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

E. Testing Requirements

1. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.2.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.2. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.6. of this permit.

4. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

5. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

$$\text{VOC content (lbs/gallon)} * \text{material usage rate (gallons)} = \text{pounds of VOC}$$

6. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.1.

F. Miscellaneous Requirements

1. This Federally Enforceable Permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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.5.
2. The following terms and conditions of this permit are federally enforceable: A..2.a - A.2.e, B., C.1, C.2, C.4 - C.6. D., and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-02777 issued November 25, 1992 and 14-03882 issued November 14, 1996 for this emissions unit.

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 3 with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	222 lbs VOC/day See terms A.2.a, A.2.e, and A.2.f The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-09(U)(2)(e)(ii).
	OAC rule 3745-31-05(D)	24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation. See terms A.2.b, A.2.c, and B.1
	OAC rule 3745-21-07(G)(2)	Exempt. See Term B.3.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.

- 2.b** 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.
- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.
- 2.e** The daily emission limitation(s) outlined in this permit is based upon the maximum daily production/application rate at 30 gallons per day for woodfinishing operations. Therefore, no daily records are required.
- 2.f** The use of methanol based stains is prohibited in emissions unit R008.

B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
- 2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.
- 3. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

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 cleanup material employed;
 - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
 - h. The number of gallons of each cleanup material employed;
 - i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
 - j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

2. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:

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

employed. "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 and miscellaneous metal parts coating 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.

- 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 (b x c).
 - 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).
- *A rolling, 12-month period includes the previous set of 12 calendar months.
- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.

- 3. The permit to install for this emissions unit R008 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene

TLV (ug/m3): 188,400

Maximum Hourly Emission Rate (lbs/hr): 8.307

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 816.9
MAGLC (ug/m3): 4486

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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. 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.
5. The permittee shall collect and record the following information each month:
 - a. the company identification of each liquid organic material employed in this emissions unit; and
 - 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).
6. The permittee shall collect and record the following information each day for the coating line when coating metal parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all coatings employed.

D. Reporting Requirements

1. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
3. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
5. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.
6. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] was employed in this emission 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.
7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

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

E. Testing Requirements

1. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.2.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.2. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.6. of this permit.

4. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

5. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

$$\text{VOC content (lbs/gallon)} * \text{material usage rate (gallons)} = \text{pounds of VOC}$$

6. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.1.

F. Miscellaneous Requirements

1. This Federally Enforceable Permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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.5.
2. The following terms and conditions of this permit are federally enforceable: A..2.a - A.2.e, B., C.1, C.2, C.4 - C.6. D., and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-02777 issued November 25, 1992 and 14-03882 issued November 14, 1996 for this emissions unit.

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>
R009 - Wood Coating Line 1A with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	222 lbs VOC/day See terms A.2.a and A.2.e The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-09(U)(2)(e)(ii).
	OAC rule 3745-31-05(D)	24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation. See terms A.2.b, A.2.c, and B.1
	OAC rule 3745-21-07(G)(2)	Exempt. See Term B.3.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.
- 2.b 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.

- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.
- 2.e** The daily emission limitation(s) outlined in this permit is based upon the maximum daily production/application rate at 30 gallons per day for woodfinishing operations. Therefore, no daily records are required.

B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
- 2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.
- 3. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

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 cleanup material employed;
- f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

- 2. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:
 - a. The name and identification number of each coating, cleaning, washoff and gluing material employed. "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 and miscellaneous metal parts coating 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.

- 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 (b x c).
- 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).

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

- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.
3. The permit to install for this emissions unit R009 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene
TLV (ug/m3): 188,400
Maximum Hourly Emission Rate (lbs/hr): 8.307
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 391.3
MAGLC (ug/m3): 4486

Pollutant: Methanol
TLV (ug/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 7.6

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 929

MAGLC (ug/m3): 6238

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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. 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.
5. The permittee shall collect and record the following information each month:
 - a. the company identification of each liquid organic material employed in this emissions unit; and
 - 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).
6. The permittee shall collect and record the following information each day for the coating line when coating metal parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all coatings employed.

D. Reporting Requirements

1. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
3. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
5. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.
6. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] was employed in this emission 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.
7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
8. The deviation reports shall be submitted in accordance with the reporting requirements of the

General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.2.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.2. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.6. of this permit.

4. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

5. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

$$\text{VOC content (lbs/gallon)} * \text{material usage rate (gallons)} = \text{pounds of VOC}$$

6. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.1.

F. Miscellaneous Requirements

1. This Federally Enforceable Permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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.5.
2. The following terms and conditions of this permit are federally enforceable: A..2.a - A.2.e, B., C.1, C.2, C.4 - C.6. D., and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-03953 issued October 23, 1996 for this emissions unit.

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>
R010 - Wood Coating Line 4 with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	222 lbs VOC/day See terms A.2.a and A.2.e
	OAC rule 3745-31-05(D)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-09(U)(2)(e)(ii). 24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation. See terms A.2.b, A.2.c, and B.1
	OAC rule 3745-21-07(G)(2)	Exempt. See Term B.3.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.
- 2.b 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.

- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.
- 2.e** The daily emission limitation(s) outlined in this permit is based upon the maximum daily production/application rate at 30 gallons per day for woodfinishing operations. Therefore, no daily records are required.

B. Operational Restrictions

- 1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
- 2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.
- 3. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

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 cleanup material employed;
- f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

- 2. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:
 - a. The name and identification number of each coating, cleaning, washoff and gluing material employed. "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 and miscellaneous metal parts coating 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.

- 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 (b x c).
- 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).

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

- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.
3. The permit to install for this emissions unit R010 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene
TLV (ug/m3): 188,400
Maximum Hourly Emission Rate (lbs/hr): 8.307
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 277.3
MAGLC (ug/m3): 4486

Pollutant: Methanol
TLV (ug/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 7.6

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1463

MAGLC (ug/m3): 6238

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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. 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.
5. The permittee shall collect and record the following information each month:
 - a. the company identification of each liquid organic material employed in this emissions unit; and
 - 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).
6. The permittee shall collect and record the following information each day for the coating line when coating metal parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all coatings employed.

D. Reporting Requirements

1. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
3. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
5. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.
6. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] was employed in this emission 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.
7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.

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

E. Testing Requirements

1. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.2.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.2. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.6. of this permit.

4. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

5. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

VOC content (lbs/gallon) * material usage rate (gallons) = pounds of VOC

6. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.1.

F. Miscellaneous Requirements

1. This Federally Enforceable Permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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.5.
2. The following terms and conditions of this permit are federally enforceable: A..2.a - A.2.e, B., C.1, C.2, C.4 - C.6. D., and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-03953 issued October 23, 1996 for this emissions unit.

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>
R011 - Wood Coating Line 5 with associated cleaning, washoff, and gluing process and Metal Parts Coating Line - Modification	OAC rule 3745-31-05(A)(3)	222 lbs VOC/day See terms A.2.a and A.2.e The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-21-09(U)(2)(e)(ii).
	OAC rule 3745-31-05(D)	24.9 TPY VOC for emissions units R006, R007, R008, R009, R010 and R011, based on a rolling 12-month summation. See terms A.2.b, A.2.c, and B.1
	OAC rule 3745-21-07(G)(2)	Exempt. See Term B.3.
	OAC rule 3745-21-09(U)(2)(e)(ii)	See term B.2.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of each coating (including gluing material) and cleanup (cleaning) material (including washoff material) employed in this emissions unit shall not exceed 7.4 lbs/gallon, as applied, for both metal and woodfinishing.
- 2.b 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. Compliance with the above limitations shall be based on a rolling, 12-month summation.

- 2.c** The total allowable volatile organic compound (VOC) emissions from all the woodfinishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating lines 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 and miscellaneous metal parts coating 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. This emissions limit is based on usages outlined in term B.1 and the VOC content in term A.2.a (See term E.4 for the calculations).
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the air toxics policy, VOC content limitation and coating and cleanup material usage limitations.
- 2.e** The daily emission limitation(s) outlined in this permit is based upon the maximum daily production/application rate at 30 gallons per day for woodfinishing operations. Therefore, no daily records are required.

B. Operational Restrictions

1. The maximum annual coating and cleanup material usage for emissions units R006, R007, R008, R009, R010 and R011, combined shall not exceed 6,500 gallons for woodworking and miscellaneous metal coating usage, based on a rolling, 12-month summation of the usage figures.
2. The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for miscellaneous metal parts coating.
3. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

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 cleanup material employed;
- f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
- h. The number of gallons of each cleanup material employed;
- i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12 month period [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
- j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12 month period [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material].

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

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

2. The permittee shall collect and record the following information each month for emissions units R006, R007, R008, R009, R010 and R011, combined:
 - a. The name and identification number of each coating, cleaning, washoff and gluing material employed. "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 and miscellaneous metal parts coating 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.

- 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 (b x c).
- 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).

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

- g. Monthly records shall be completed within 15 days following the end of each calendar month and shall include the updated rolling, 12-month VOC emission rate.
3. The permit to install for this emissions unit R011 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: Toluene
TLV (ug/m3): 188,400
Maximum Hourly Emission Rate (lbs/hr): 8.307
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 323.5
MAGLC (ug/m3): 4486

Pollutant: Methanol
TLV (ug/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 7.6

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1707

MAGLC (ug/m3): 6238

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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. 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.
5. The permittee shall collect and record the following information each month:
 - a. the company identification of each liquid organic material employed in this emissions unit; and
 - 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).
6. The permittee shall collect and record the following information each day for the coating line when coating metal parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all coatings employed.

D. Reporting Requirements

1. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of volatile organic compound emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter. Exceeding the rolling, 12-month limit is a violation for each day of the last month of each 12 month period in which the limit is exceeded, regardless of whether a compliance plan is submitted.
2. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total usages in gallons from coatings and cleanup materials from emissions units R006, R007, R008, R009, R010 and R011, combined for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.
3. The permittee shall submit quarterly reports which identify all exceedances of the VOC content limitation in term A.2.a. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.b. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.
5. If the facility (R006, R007, R008, R009, R010 and R011) has a rolling, 12 month record that exceeds 24.9 tons of VOC from combined operations associated with the manufacture of wood furniture, or wood furniture components, 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 Hamilton County Department of Environmental Services that the VOC emission limit was exceeded .
 - b. Within three months after the end of that rolling, 12-month period in which the exceedance occurred, a compliance plan to the Hamilton County Department of Environmental Services to comply with the presumptive RACT standards specified within USEPA document EPA-453/R-96-007 “ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations” (April 1996). Any divergence from the presumptive RACT standards and the model rule provided within that document shall be described at the time of the submittal of the 3-month compliance plan. Compliance with the presumptive RACT standards is to be achieved within 12 months after the rolling, 12-month period exceedance, unless otherwise requested by the permittee and approved by USEPA as a revision to Ohio’s state implementation plan for ozone.
 - c. 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.
6. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] was employed in this emission 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.
7. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit in term B.2. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
8. The deviation reports shall be submitted in accordance with the reporting requirements of the

General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limit of 24.9 TPY VOC from emissions units R006, R007, R008, R009, R010 and R011, combined, based on a rolling 12-month summation shall be demonstrated by the recordkeeping requirements in term and condition C.2.

2. Usage Limitations:
6,500 gallons/yr for coatings and cleanup materials for both woodfinishing and miscellaneous metal parts coating operations.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.2. of this permit.

3. Usage Limitations:
3 gallons per day for miscellaneous metal parts coating.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in term C.6. of this permit.

4. OC Content Limitations:
7.4 lbs/gallon for coatings and cleanup materials

Applicable Compliance Method:

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.

5. The VOC emissions are calculated by multiplying the VOC content times the material usage.

For coatings and cleanup materials, use the following equation:

$$\text{VOC content (lbs/gallon)} * \text{material usage rate (gallons)} = \text{pounds of VOC}$$

6. Compliance with the HAP emission limitation in term A.2.b shall be determined by the record keeping in term C.1.

F. Miscellaneous Requirements

GRK Manufacturing Company

PTI Application: 14-05443

Modification Issued: 9/9/2003

Facility ID: 1409040302

Emissions Unit ID: R011

1. This Federally Enforceable Permit limits the potential emissions of volatile organic compounds from the wood furniture finishing processes, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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, its associated cleaning, washoff and gluing processes and the miscellaneous metal parts coating line 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.5.
2. The following terms and conditions of this permit are federally enforceable: A..2.a - A.2.e, B., C.1, C.2, C.4 - C.6. D., and E.
3. The terms and conditions in this permit to install shall supersede permit to install 14-03953 issued October 23, 1996 for this emissions unit.