

John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

12/5/2013

Certified Mail

David Hish  
GRK Manufacturing Co.  
1200 Dayton St  
Hamilton, OH 45011

Yes	TOXIC REVIEW
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1409040302  
Permit Number: P0115717  
Permit Type: Renewal  
County: Butler

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: SWOAQA



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
GRK Manufacturing Co.**

Facility ID:	1409040302
Permit Number:	P0115717
Permit Type:	Renewal
Issued:	12/5/2013
Effective:	12/5/2013
Expiration:	12/5/2018





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
GRK Manufacturing Co.

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**Final Permit-to-Install and Operate**  
GRK Manufacturing Co.  
**Permit Number:** P0115717  
**Facility ID:** 1409040302  
**Effective Date:** 12/5/2013

## Authorization

Facility ID: 1409040302  
Application Number(s): A0048990  
Permit Number: P0115717  
Permit Description: FEPTIO renewal for six wood coating and metal coating paint spray booths.  
Permit Type: Renewal  
Permit Fee: \$0.00  
Issue Date: 12/5/2013  
Effective Date: 12/5/2013  
Expiration Date: 12/5/2018  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

GRK Manufacturing Co.  
1200 DAYTON STREET  
HAMILTON, OH 45011

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

A handwritten signature in black ink, appearing to read "Scott J. Nally".

Scott J. Nally  
Director



## Authorization (continued)

Permit Number: P0115717

Permit Description: FEPTIO renewal for six wood coating and metal coating paint spray booths.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>R006</b>
Company Equipment ID:	Coating Line 1
Superseded Permit Number:	P0097024
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R007</b>
Company Equipment ID:	Coating Line 2
Superseded Permit Number:	P0097019
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R008</b>
Company Equipment ID:	Coating Line 3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R009</b>
Company Equipment ID:	Coating Line 1A
Superseded Permit Number:	P0097021
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R010</b>
Company Equipment ID:	Coating Line 4
Superseded Permit Number:	P0097022
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>R011</b>
Company Equipment ID:	Coating Line 5
Superseded Permit Number:	P0097023
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
GRK Manufacturing Co.  
**Permit Number:** P0115717  
**Facility ID:** 1409040302  
**Effective Date:** 12/5/2013

## **A. Standard Terms and Conditions**



**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.



**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.



**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



**Final Permit-to-Install and Operate**  
GRK Manufacturing Co.  
**Permit Number:** P0115717  
**Facility ID:** 1409040302  
**Effective Date:** 12/5/2013

## **B. Facility-Wide Terms and Conditions**



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) 2., 3., 4., and 5.
2. The allowable emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from emissions units R006 (Coating Line 1), R007 (Coating Line 2), R008 (Coating Line 3), R009 (Coating Line 1A), R010 (Coating Line 4), R011 (Coating Line 5), and all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit-to-install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.
3. The permittee shall collect and record the following information each month for the emissions units identified in B.2:
  - 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 of all 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 [the total number of gallons of each cleanup material employed less the number of gallons of each cleanup material collected for reuse and disposal].



- i) The total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) times the emissions factor or overall control efficiency\*\* (if applicable) for each coating plus the sum of (f) times (h) for each cleanup material plus individual HAP emissions from any de minimus, registration status and/or permit exempt emissions unit at the facility].
- j) The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) times the emissions factor or overall control efficiency\*\* (if applicable) for each coating plus the sum of (g) times (h) for each cleanup material plus combined HAP emissions from any de minimus, registration status and/or permit exempt emissions unit at the facility].
- k) The updated rolling, 12-month summation of the individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.
- l) The updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

\*\* Overall control efficiency shall be from the most recent performance test that demonstrated that the emissions unit was in compliance.

- 4. The permittee shall submit deviation (excursion) reports which identify any exceedance of the rolling, 12-month HAP emission limitations outlined in 2.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- 5. Compliance with the HAP emission limitations in B.2. shall be demonstrated by the record keeping in B.3.
- 6. The Ohio EPA has determined that this facility may be applicable to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: <http://www.epa.gov/ttn/atw/area/arearules.html>



**Final Permit-to-Install and Operate**  
GRK Manufacturing Co.  
**Permit Number:** P0115717  
**Facility ID:** 1409040302  
**Effective Date:** 12/5/2013

## **C. Emissions Unit Terms and Conditions**



**1. R006, Coating Line 1**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 1 - Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(1)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)b. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)b.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).
b.	OAC rule 3745-31-05(D)	See Sections B.2.  See b)(2)a.
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4) and d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) Monitoring and/or Recordkeeping Requirements

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
  
- (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 present month plus the previous 11 months of operation.

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 in tons.

- (3) 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): 8.307

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 2043

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 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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC



rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and



- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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



- ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (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 c)(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.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

The 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 pounds per gallon, as applied, for both metal and woodfinishing.

**Applicable Compliance Method:**

USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

- b. **Emission Limitation:**

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.



Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)b. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

- (2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).
  - (3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).
- g) **Miscellaneous Requirements**
- (1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).



**2. R007, Coating Line 2**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 2 - Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(1)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)c. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.</p> <p>See b)(2)a., b)(2)b. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-31-05(D)	<p>See Section B.2.</p> <p>See b)(2)a.</p>
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4), d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. The daily emission limitation 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.
- d. The use of methanol-based stains is prohibited in emissions unit R007.
- e. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
  
- (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 present month plus the previous 11 months of operation.

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 in tons.

- (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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
  - (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
  - (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
  - (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
  - (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
    - a. the date of the inspection;
    - b. a description of each/any problem identified and the date it was corrected;
    - c. a description of any maintenance and repairs performed; and
    - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.



- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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
    - ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
  - b. the probable cause of each deviation (excursion);



- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).



- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (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 c)(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.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.
- Applicable Compliance Method:
- VOC emissions shall be calculated and compliance with the VOC emissions limit determined by using the following equation:
- $$\text{lbs VOC/day} = (A) \times (B)$$
- where,
- A = maximum daily usage rate (30 gallons)
- B = maximum allowable VOC content (7.4 lbs/gallon)
- b. Emission Limitation:
- The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- Applicable Compliance Method:
- USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60,



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

c. Emission Limitation:

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)a. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

- (2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).
- (3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).

g) Miscellaneous Requirements

- (1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).



**3. R008, Coating Line 3**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 3 Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(2)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)c. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.</p> <p>See b)(2)a., b)(2)b. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-31-05(D)	<p>See Section B.2.</p> <p>See b)(2)a.</p>
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4), d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. The daily emission limitation 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.
- d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
  
- (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 present month plus the previous 11 months of operation.

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 in tons.

- (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): 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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
- a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;
  - c. a description of any maintenance and repairs performed; and
  - d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.



- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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
    - ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
  - b. the probable cause of each deviation (excursion);



- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).



- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (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 c)(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.
- f) **Testing Requirements**
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. **Emission Limitation:**
- Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.
- Applicable Compliance Method:
- VOC emissions shall be calculated and compliance with the VOC emissions limit determined by using the following equation:
- $$\text{lbs VOC/day} = (A) \times (B)$$
- where,
- A = maximum daily usage rate (30 gallons)
- B = maximum allowable VOC content (7.4 lbs/gallon)
- b. **Emission Limitation:**
- The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- Applicable Compliance Method:
- USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60,



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

c. Emission Limitation:

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)a. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

- (2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).
- (3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).

g) Miscellaneous Requirements

- (1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).



**4. R009, Coating Line 1A**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 1A - Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(2)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)c. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.</p> <p>See b)(2)a., b)(2)b. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-31-05(D)	<p>See Section B.2.</p> <p>See b)(2)a.</p>
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4), d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. The daily emission limitation 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.
- d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
  
- (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 ( $b \times c$ );
  - 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 present month plus the previous 11 months of operation.

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 in tons.

- (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): 2043

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required,



even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;



- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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



- ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
  
- (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 c)(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.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.

Applicable Compliance Method:

VOC emissions shall be calculated and compliance with the VOC emissions limit determined by using the following equation:

$$\text{lbs VOC/day} = (A) \times (B)$$

where,

A = maximum daily usage rate (30 gallons)

B = maximum allowable VOC content (7.4 lbs/gallon)

- b. **Emission Limitation:**

The 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 pounds per gallon, as applied, for both metal and woodfinishing.

Applicable Compliance Method:

USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

c. Emission Limitation:

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)a. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

(2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).

(3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).

g) Miscellaneous Requirements

(1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).



**5. R010, Coating Line 4**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 4 - Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(2)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)c. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.  See b)(2)a., b)(2)b. and b)(2)c.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).
b.	OAC rule 3745-31-05(D)	See Section B.2.  See b)(2)a.
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4), d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. The daily emission limitation 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.
- d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
- (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 present month plus the previous 11 months of operation.

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 in tons.

- (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): 2043

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required,



even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;



- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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



- ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (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 c)(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.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.

Applicable Compliance Method:

VOC emissions shall be calculated and compliance with the VOC emissions limit determined by using the following equation:

$$\text{lbs VOC/day} = (A) \times (B)$$

where,

A = maximum daily usage rate (30 gallons)

B = maximum allowable VOC content (7.4 lbs/gallon)

- b. Emission Limitation:

The 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 pounds per gallon, as applied, for both metal and woodfinishing.



Applicable Compliance Method:

USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

c. Emission Limitation:

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)a. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

- (2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).
- (3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).

g) Miscellaneous Requirements

- (1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).



**6. R011, Coating Line 5**

**Operations, Property and/or Equipment Description:**

Paint Spray Booth 5 - Modification

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(3) and d)(4).
  - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - a. b)(2)b., b)(2)a., c)(1), d)(2), e)(3), e)(4), e)(5), e)(6), f)(1)c. and g)(1).
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.</p> <p>See b)(2)a., b)(2)b. and b)(2)c.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(C) and 3745-21-09(U)(2)(e)(ii).</p>
b.	OAC rule 3745-31-05(D)	<p>See Section B.2.</p> <p>See b)(2)a.</p>
c.	OAC rule 3745-17-11(C)	See c)(3), c)(4), d)(6) through d)(10).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(2).



(2) Additional Terms and Conditions

- a. The total allowable 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.
- b. The 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 pounds per gallon, as applied, for both metal and woodfinishing.
- c. The daily emission limitation 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.
- d. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC content limitation, and coating and cleanup material usage limitations.

c) 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- (2) The maximum daily coating use for this emissions unit shall not exceed 3 gallons per day for the coating of miscellaneous metal parts.
- (3) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
- (4) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.



d) **Monitoring and/or Recordkeeping Requirements**

- (1) 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; and
  - c. The total volume, in gallons, of all coatings employed.
  
- (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 present month plus the previous 11 months of operation.

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 in tons.

- (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): 2043

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required,



even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

- (4) 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.
- (6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.
- (7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.
- (8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.
- (9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:
  - a. the date of the inspection;
  - b. a description of each/any problem identified and the date it was corrected;



- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

- (10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. The total allowable 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



- ii. 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 parts, based upon a rolling, 12-month summation of the coating and cleanup usage figures.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (4) 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 limitation 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.
- (5) 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. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (6) The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of the VOC emissions in TPY for each calendar month from emissions units R006, R007, R008, R009, R010 and R011, combined, for each calendar month. The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (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 c)(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.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 222 pounds per day.

Applicable Compliance Method:

VOC emissions shall be calculated and compliance with the VOC emissions limit determined by using the following equation:

$$\text{lbs VOC/day} = (A) \times (B)$$

where,

A = maximum daily usage rate (30 gallons)

B = maximum allowable VOC content (7.4 lbs/gallon)

b. Emission Limitation:

The 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 pounds per gallon, as applied, for both metal and woodfinishing.



Applicable Compliance Method:

USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24 as outlined in 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

c. Emission Limitation:

24.9 TPY VOC, for emissions units R006, R007, R008, R009, R010, and R011, combined, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation in b)(2)a. shall be demonstrated by the record keeping in d)(2).

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 (pounds/gallon) x material usages (gallons) = pounds of VOC.  
Divide total pounds by 2000 to convert to tons.

- (2) Compliance with the annual material usage limitation in c)(1) shall be demonstrated by the recordkeeping required in d)(2).
- (3) Compliance with the daily material usage limitation in c)(2) shall be demonstrated by the recordkeeping required in d)(1).

g) Miscellaneous Requirements

- (1) This Federally Enforceable Permit limits the potential emission of volatile organic compounds from the wood furniture finishing processes and associated cleaning, wash-off 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, wash-off and gluing processes exceed 24.9 TPY during any rolling 12-month period, this facility should notify the Southwest Ohio Air Quality Agency within 30 days. See e)(4).