



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
WAYNE COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-20418

Fac ID: 0285000420

DATE: 6/21/2005

L and J Woodworking, Ltd.
Ray Yoder
9035 Senff Rd
Dundee, OH 44624

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

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

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

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

Sincerely,

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

cc: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 6/21/2005
Effective Date: 6/21/2005**

FINAL PERMIT TO INSTALL 02-20418

Application Number: 02-20418
Facility ID: 0285000420
Permit Fee: **\$2200**
Name of Facility: L and J Woodworking, Ltd.
Person to Contact: Ray Yoder
Address: 9035 Senff Rd
Dundee, OH 44624

Location of proposed air contaminant source(s) [emissions unit(s)]:
**9035 Senff Rd.
Dundee, Ohio**

Description of proposed emissions unit(s):
3 wood furniture coating lines.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

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14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	91.0 tpy
PE	10.1 tpy

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Woodworking shop controlled by a 5,100 acfm cyclone and return-air baghouse system, and associated loadout.	OAC rule 3745-31-05(A)(3)	See A.2.a, A.2.b, A.2.c, B.2 and B.3 below.
	OAC rule 3745-17-07(B)	Exempt due to location in non-Appendix A area.
	OAC rule 3745-17-08(B)	Exempt due to location in non-Appendix A area.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.01 grain per dscf of exhaust gas, 0.44 pound per hour and 1.9 tons per year from the dust collector exhaust.
- 2.b No visible emissions from the dust collector exhaust.

- 2.c Visible emissions shall not exceed 20% opacity as a 3-minute average from fugitive particulate emissions during loadout.

B. Operational Restrictions

1. The pressure drop across the dust collector shall be maintained within the manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.
2. The dust collector shall be operated with a sufficient volumetric flow rate to eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
3. During any unloading of sawdust into trucks from the cyclone dust collector hopper, every attempt shall be made to reduce or control fugitive dust emissions by minimizing the drop height to the truck, utilizing a truck with high side boards, or placing a covering over the discharge chute during the unloading process. The collection efficiency shall be considered adequate if there are no visible particulate emissions of fugitive dust from the fabric tube during wood waste storage silo load-out in excess of 20% opacity, as a 3-minute average.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the dust collector on a weekly basis.
2. When the dust collector is vented outside the building, the permittee shall perform weekly checks for any visible particulate emissions from the exhaust of the dust collector. The presence or absence of any visible emissions from the exhausts of the dust collectors shall be noted in an operations log. If any visible emissions are observed, corrective actions shall be taken to eliminate the visible emissions and these actions shall also be noted in the operations log.

NOTE: The exhaust from the dust collector for this emissions unit are currently vented back into the building. This is the normal operating mode for this emissions unit.

3. The permittee shall record in an operations log any time the telescoping fabric tubes on the hopper

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Emissions Unit ID: **P001**

and fabric covered conveyor used to load out sawdust are not in use when sawdust load out is in operation.

4. The permittee shall maintain copies of these records for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. all periods of time during which the pressure drop across the dust collect did not comply with the allowable range specified above;
 - b. all periods of time that visible emissions from the baghouse exhaust were noted in the operations log when the dust collector was vented outside; and
 - c. all periods of time that the telescoping fabric tubes were not used during while the sawdust load out was in operation

The quarterly deviations reports shall be submitted in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.01 gr/dscf and 0.44 pound per hour of particulate emissions

Applicable Compliance Methods:

If required compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).

- b. Emission Limitation:
1.9 tons per year of particulate emissions

Applicable Compliance Methods:

Compliance with this emission limitation shall be determined by the following equation:

$$(0.055 \text{ gr/dscf}) \times (5,100 \text{ cfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb}) \times (1-.99)$$

Where:

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Emissions Unit ID: **P001**

0.055 gr/dscf is the emission factor from AP-42, table 10.4-1 version 4/78; and
5,100 cfm is the dust collector flow rate; and
99% is the dust collector control efficiency.

- c. Emission Limitation:
No visible emissions from the dust collector exhaust.

Applicable Compliance Methods:

Compliance with the no visible emission limit for the exhausts from the dust collector shall be determined using Test Method 22-like visible emission observations. (Although Test Method 22 applies to fugitive emissions units, the visible/no visible emissions observation technique of Test Method 22 can be applied to ducted emissions, i.e., Test Method 22-like visible emission observations.)

- d. Emission Limitation:
20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determine by OAC rule 3745-17-03(B)(3), in accordance with Method 9, as sent forth in 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Woodworking sanders with sander dust removed from the work area by a 3,950 acfm cyclone, and the associated loadout.	OAC rule 3745-31-05(A)(3)	See A.2.a, A.2.b, A.2.c, B.2 and B.3 below.
	OAC rule 3745-17-07(B)	Exempt due to location in non-Appendix A area.
	OAC rule 3745-17-08(B)	Exempt due to location in non-Appendix A area.
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.055 grain per dscf of exhaust gas, 1.86 pound per hour and 8.2 tons per year from the cyclone exhaust.

Emissions Unit ID: **P002**

- 2.b** Visible emissions from the cyclone exhaust shall not exceed 5 % opacity as a six-minute average.
- 2.c** Visible emissions shall not exceed 20% opacity as a 3-minute average from fugitive particulate emissions during loadout.

B. Operational Restrictions

1. The cyclone shall be operated with a sufficient volumetric flow rate to eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
2. During any unloading of sawdust into the trailer, every attempt shall be made to reduce or control fugitive dust emissions by minimizing the drop height, utilizing a truck with high side boards, or placing a covering over the discharge chute during the unloading process. The collection efficiency shall be considered adequate if there are no visible particulate emissions of fugitive dust from the fabric tube during wood waste storage load-out in excess of 20% opacity, as a 3-minute average.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record in an operations log any time the telescoping fabric tube or other means to reduce drop height is not in use when sawdust load out is in operation.
2. The permittee shall maintain copies of these records for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include all periods of time that the telescoping fabric tubes were not used during while the sawdust load out was in operation.

The quarterly deviations reports shall be submitted in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
0.055 gr/dscf and 1.86 pound per hour of particulate emissions

Applicable Compliance Methods:

If required compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).

- b. Emission Limitation:
3.8 tons per year of particulate emissions

Applicable Compliance Methods:

Compliance with this emission limitation shall be determined by the following equation:

$$(0.055 \text{ gr/dscf}) \times (3,950 \text{ cfm}) \times (60 \text{ min/hr}) \times (8760 \text{ hr/yr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:

0.055 gr/dscf is the emission factor from AP-42, table 10.4-1 version 4/78; and
3,950 cfm is the cyclone flow rate.

- c. Emission Limitation:
5% opacity as a six-minute average from the cyclone exhaust.

Applicable Compliance Methods:

If requested, compliance shall be determined by OAC rule 3745-17-03(B)(3), in accordance with Method 9, as sent forth in 40 CFR Part 60, Appendix A.

- d. Emission Limitation:
20% opacity as a 3-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined by OAC rule 3745-17-03(B)(3), in accordance with Method 9, as sent forth in 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R001 - Stain booth with one HVLP gun to coat wood furniture. Parts air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d, and B.1 below. The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-31-05(C)	See A.2.c, A.2.e, B.2, and B.3 below.

2. Additional Terms and Conditions

- 2.a Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings shall not exceed 17.0 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 2.5 gallons per hour.

Emissions Unit ID: **R001**

- 2.c** The VOC emissions from all coatings and cleanup materials shall not exceed 38.6 tons per year, based upon a rolling, 12-month summation.
- 2.d** The VOC content of each coating shall not exceed 6.8 pounds per gallon, as applied.
- 2.e** Total emissions from emissions units R001, R002, and R003, combined shall not exceed 9.9tons per year of each single hazardous air pollutant (HAP), based upon a rolling, 12-month summation.

B. Operational Restrictions

- 1. All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.
- 2. The maximum coating and clean up material usage for this emissions unit, shall not cause emissions to exceed 38.6 tons of VOC per rolling 12 months. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month	Maximum Allowable VOC (tons)	Maximum Allowable Single HAP (tons)
1	9.7	3.3
2	9.7	3.3
3	9.7	3.3
4	9.7	3.3
5	12.9	4.1
6	16.1	5.0
7	19.3	5.8
8	22.5	6.6
9	25.7	7.4
10	29.0	8.3
11	32.2	9.1
12	38.6	9.9

- 3. After the first 12 calendar months of operation following the issuance of this permit, compliance with the rolling 12-month limitations of VOC, and single hazardous air pollutant (HAP) shall be based upon the rolling 12-month summations of the emissions of VOC, and single HAP.

Tons VOC emissions current month for R001	+	Previous 11 months tons of VOC	Total 12-month < or = 38.6 tons VOC
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Tons single HAP emissions current month for R001, R002, and R003, combined	+	Previous 11 months tons single HAP	Total 12-month < or = 9.9 tons single HAP
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C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
 - a. the company identification for each coating and photochemically reactive cleanup material employed;
 - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
 - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
 - d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
 - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
 - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

Emissions Unit ID: R001

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
 - a. the company identification for each coating and/or cleanup material employed;
 - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
 - c. the volatile organic compound (VOC) content of each coating, in lbs/gallon as applied;
 - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
 - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
 - f. the total number of hours the emissions unit was in operation; and
 - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.
4. The permittee shall collect and record each month for the non-photochemically reactive cleanup material employed:
 - a. the volatile organic compound (VOC) content of each non-photochemically cleanup materials, in lbs/gallon as applied;
 - b. the number of gallons of cleanup material employed minus the number of gallons of cleanup material recovered for disposal;
 - c. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/month, i.e., sum of (a) times (b);
5. The permittee shall collect and record the following information each month for emissions units R001, R002, and R003, combined:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the single Hazardous Air Pollutant (HAP)¹ content for each HAP of each coating and cleanup material, in pounds of individual HAP per gallon of coating, as applied;

- d. the total single HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month, i.e., for each HAP the sum of (b) times (c) for each coating and cleanup material divided by 2000; and
- e. the rolling, 12-month summation of the emissions of each single HAP from emissions units R001, R002, and R003, combined for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the cumulative emissions from R001, R002 and R003, combined, i.e., the summation of (d) in tons per rolling, 12-month period.

¹A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

- 6. The permittee shall record each month the rolling, 12-month summation of VOC emissions from this emissions unit for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the summation of OC emissions, i.e., the sum of 2.h plus 3.e plus 4.c divided by 2000 for the previous 12-month period.
- 7. The permit to install for this emissions unit, R001, and R001, R002 and R003, combined, 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: n-butyl acetate

TLV (mg/m³): 712

Maximum Hourly Emission Rate (lbs/hr): 16.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 9,289

MAGLC (ug/m³): 16,968

8. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

9. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for the days during which a photochemically reactive coatings or cleanup materials were employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
 - b. for days photochemically reactive coatings and cleanup materials are not employed, an identification of each day that the average VOC emissions from the coatings exceeded 17.0 lbs/hr in this emissions unit, and the actual average VOC emissions for each such day;
 - c. an identification of each day during which the VOC content of any coating exceeded 6.8 pounds per gallon in this emissions unit and the actual VOC content of each such coating employed;
 - d. all exceedances of the rolling 12-month emissions limitation for each single HAP and, during the first 12 months of operation, all exceedances of each single HAP cumulative emission limitation for emissions units R001, R002, and R003, combined; and
 - e. all exceedances of the rolling, 12-month VOC emission limitation for this emissions unit.

The quarterly deviations reports shall be submitted in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall also submit annual reports that summarize the following information:
 - a. the emissions of VOC from this emissions unit; and
 - b. the emissions of each single HAP from emissions units R001, R002, and R003, combined.

The reports shall include the emissions calculations, shall be submitted by January 31 of each year, and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitation:
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.

- b. Emissions Limitation:
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.

- c. Emissions Limitation:
17.0 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.

Applicable Compliance Method:

Compliance shall be determined by the daily values calculated in C.3.g. based on the record keeping specified in Section C.3.

- d. Emissions Limitation:
38.6 tons of VOC emissions per rolling, 12-month period from all coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be determined by the value recorded in C.7 based on the record keeping as specified in Section C.2, C.3 and C.4.

- e. Emissions Limitation:
6.8 pound of VOC per gallon coating

Applicable Compliance Method:

Compliance shall be determined by the daily values recorded according to C.2.g and C.3.c.

- f. Emissions Limitations:
9.9 tons of each single HAP, based upon a rolling, 12-month summation for R001, R002, and R003, combined.

Applicable Compliance Method:

Compliance shall be based on the record keeping as specified in Sections C.5.e.

2. Any determination of VOC content, solids contents, or density of coating material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings. The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24. Ohio EPA may require the permittee, if it uses formulation data supplied by the manufacturer, to determine data used in the calculation of the VOC content of coating materials by Reference Method 24 or an equivalent or alternative method.

US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

F. Miscellaneous Requirements

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and conditions of this permit to install are federally enforceable: A-F, except C.7, C.8 and C.9.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R002 - Sealer booth to coat wood furniture. Parts air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d, and B.1 below. The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-31-05(C)	See A.2.c, A.2.e, B.2, and B.3 below.

2. Additional Terms and Conditions

- 2.a** Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.

- 2.b** Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings shall not exceed 12.0 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 2.5 gallons per hour.
- 2.c** The VOC emissions from all coatings and cleanup materials shall not exceed 26.2 tons per year, based upon a rolling, 12-month summation.
- 2.d** The VOC content of each coating shall not exceed 4.6 pounds per gallon, as applied.
- 2.e** Total emissions from emissions units R001, R002, and R003, combined shall not exceed 9.9 tons per year of each single hazardous air pollutant (HAP), based upon a rolling, 12-month summation.

B. Operational Restrictions

- All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.
- The maximum coating and clean up material usage for this emissions unit, shall not cause emissions to exceed 26.2 tons of VOC per rolling 12 months. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month	Maximum Allowable VOC (tons)	Maximum Allowable Single HAP (tons)
1	9.1	3.3
2	9.1	3.3
3	9.1	3.3
4	8.7	3.3
5	11.0	4.1
6	13.1	5.0
7	15.3	5.8
8	17.5	6.6
9	19.7	7.4
10	21.8	8.3
11	24.0	9.1
12	26.2	9.9

- After the first 12 calendar months of operation following the issuance of this permit, compliance

with the rolling 12-month limitations of VOC, and single hazardous air pollutant (HAP) shall be based upon the rolling 12-month summations of the emissions of VOC, and single HAP.

Tons VOC emissions current month for R002	+	Previous 11 months tons of VOC	Total 12-month < or = 26.2 tons VOC
Tons single HAP emissions current month for R001, R002, and R003, combined	+	Previous 11 months tons single HAP	Total 12-month < or = 9.9 tons single HAP

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
 - a. the company identification for each coating and photochemically reactive cleanup material employed;
 - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
 - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
 - d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
 - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
 - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
 - a. the company identification for each coating and/or cleanup material employed;
 - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
 - c. the volatile organic compound (VOC) content of each coating, in lbs/gallon as applied;
 - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
 - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
 - f. the total number of hours the emissions unit was in operation; and
 - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.
4. The permittee shall collect and record each month for the non-photochemically reactive cleanup material employed:
 - a. the volatile organic compound (VOC) content of each non-photochemically cleanup materials, in lbs/gallon as applied;
 - b. the number of gallons of cleanup material employed minus the number of gallons of cleanup material recovered for disposal;
 - c. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/month, i.e., sum of (a) times (b);
5. The permittee shall collect and record the following information each month for emissions units R001, R002, and R003, combined:
 - a. the name and identification number of each coating and cleanup material, as applied;

- b. the number of gallons of each coating and cleanup material employed;
- c. the single Hazardous Air Pollutant (HAP)¹ content for each HAP of each coating and cleanup material, in pounds of individual HAP per gallon of coating, as applied;
- d. the total single HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month, i.e., for each HAP the sum of (b) times (c) for each coating and cleanup material divided by 2000; and
- e. the rolling, 12-month summation of the emissions of each single HAP from emissions units R001, R002, and R003, combined for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the cumulative emissions from R001, R002 and R003, combined, i.e., the summation of (d) in tons per rolling, 12-month period.

¹A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

- 6. The permittee shall record each month the rolling, 12-month summation of VOC emissions from this emissions unit for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the summation of VOC emissions, i.e., the sum of 2.h plus 3.e plus 4.c divided by 2000 for the previous 12-month period.
- 7. The permit to install for this emissions unit, R002, and R001, R002and R003, combined, 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: n-butyl acetate

TLV (mg/m3): 712

Maximum Hourly Emission Rate (lbs/hr): 16.0

Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 9,289

MAGLC (ug/m3): 16,968

8. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

9. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still

satisfies the "Air Toxic Policy"; and

- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for the days during which a photochemically reactive coatings or cleanup materials were employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
 - b. for days photochemically reactive coatings and cleanup materials are not employed, an identification of each day that the average VOC emissions from the coatings exceeded 12.0 lbs/hr in this emissions unit, and the actual average VOC emissions for each such day;
 - c. an identification of each day during which the VOC content of any coating exceeded 4.6 pounds per gallon in this emissions unit and the actual VOC content of each such coating employed;
 - d. all exceedances of the rolling 12-month emissions limitation for each single HAP and, during the first 12 months of operation, all exceedances of each single HAP cumulative emission limitation for emissions units R001, R002, and R003, combined; and
 - e. all exceedances of the rolling, 12-month VOC emission limitation for this emissions unit.

The quarterly deviations reports shall be submitted in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall also submit annual reports that summarize the following information:

- a. the emissions of VOC from this emissions unit; and
- b. the emissions of each single HAP from this emissions unit and from emissions units R001, R002, and R003, combined.

The reports shall include the emissions calculations, shall be submitted by January 31 of each year, and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.
 - b. Emissions Limitation:
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.
 - c. Emissions Limitation:
12.0 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.3.g. based on the record keeping specified in Section C.3.
 - d. Emissions Limitation:
26.2 tons of VOC emissions per rolling, 12-month period from all coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be determined by the value recorded in C.7 based on the record keeping as specified in Section C.2, C.3 and C.4.

- e. Emissions Limitation:
4.6 pound of VOC per gallon coating

Applicable Compliance Method:

Compliance shall be determined by the daily values recorded according to C.2.g and C.3.c.

- f. Emissions Limitations:
9.9 tons of each single HAP, based upon a rolling, 12-month summation for R001, R002, and R003, combined.

Applicable Compliance Method:

Compliance shall be based on the record keeping as specified in Sections C.5.e.

2. Any determination of VOC content, solids contents, or density of coating material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings. The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24. Ohio EPA may require the permittee, if it uses formulation data supplied by the manufacturer, to determine data used in the calculation of the VOC content of coating materials by Reference Method 24 or an equivalent or alternative method.

US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

F. Miscellaneous Requirements

1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and conditions of this permit to install are federally enforceable: A-F, except C7, C.8 and C.9.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R003 - Topcoat booth to coat wood furniture. Parts air dried.	OAC rule 3745-31-05(A)(3)	See A.2.b , A.2.d, and B.1 below. The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).
	OAC rule 3745-21-07(G)(2)	See A.2.a. below.
	OAC rule 3745-31-05(C)	See A.2.c, A.2.e, B.2, B.3, and B.4 below.

2. Additional Terms and Conditions

- 2.a Each day that a photochemically reactive material [as defined in OAC 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup material and from photochemically reactive materials shall not exceed 8 pounds per hour and 40 pound per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with this limit.
- 2.b Each day that photochemically reactive materials [as defined in OAC 3745-21-01(C)(5)] are not employed, the volatile organic compound (VOC) emissions from coatings shall not exceed 12.0 pounds per hour, as a daily average. This limit is based upon the maximum application rate of 2.5 gallons per hour.

Emissions Unit ID: **R003**

- 2.c** The VOC emissions from all coatings and cleanup materials shall not exceed 26.2 tons per year, based upon a rolling, 12-month summation.
- 2.d** The VOC content of each coating shall not exceed 4.6 pounds per gallon, as applied.
- 2.e** Total emissions from emissions units R001, R002, and R003, combined shall not exceed 9.9 tons per year of each single hazardous air pollutant (HAP), based upon a rolling, 12-month summation.

B. Operational Restrictions

- All exhaust from the spray booth shall pass through the dry filters whenever this emissions unit is in operation.
- The maximum coating and clean up material usage for this emissions unit, shall not cause emissions to exceed 26.2 tons of VOC per rolling 12 months. To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month	Maximum Allowable VOC (tons)	Maximum Allowable Single HAP (tons)
1	9.1	3.3
2	9.1	3.3
3	9.1	3.3
4	8.7	3.3
5	11.0	4.1
6	13.1	5.0
7	15.3	5.8
8	17.5	6.6
9	19.7	7.4
10	21.8	8.3
11	24.0	9.1
12	26.2	9.9

- After the first 12 calendar months of operation following the issuance of this permit, compliance with the rolling 12-month limitations of VOC, and single hazardous air pollutant (HAP) shall be based upon the rolling 12-month summations of the emissions of VOC, and single HAP.

Tons VOC emissions current month for R003	+	Previous 11 months tons of VOC	Total 12-month < or = 26.2 tons VOC
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Tons single HAP emissions current month for R001, R002, and R003, combined	+	Previous 11 months tons single HAP	Total 12-month < or = 9.9 tons single HAP
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C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document all time periods when the dry filters were not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup material are employed in this emissions unit:
 - a. the company identification for each coating and photochemically reactive cleanup material employed;
 - b. the number of gallons of each coating and photochemically reactive cleanup material employed minus the number of gallons of coating and/or cleanup material recovered for disposal;
 - c. the OC content of each coating and photochemically reactive cleanup material, in pounds OC per gallon;
 - d. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds OC per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average);
 - g. the VOC content of each coating and photochemically reactive cleanup material, in pounds VOC per gallon; and
 - h. the total emissions rate for all coatings and photochemically reactive cleanup materials, in pounds VOC per day.

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

Emissions Unit ID: R003

3. The permittee shall collect and record the following information for each day that photochemically reactive coatings or cleanup materials are not employed in this emissions unit:
 - a. the company identification for each coating and/or cleanup material employed;
 - b. documentation that photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) was not used;
 - c. the volatile organic compound (VOC) content of each coating, in lbs/gallon as applied;
 - d. the number of gallons of each coating employed minus the number of gallons of coating recovered for disposal;
 - e. the total VOC emissions from all coatings employed, in lbs/day, i.e., sum of (c) times (d);
 - f. the total number of hours the emissions unit was in operation; and
 - g. the average hourly VOC emission rate for all coatings, i.e., (e)/(f), in lbs/hr.
4. The permittee shall collect and record each month for the non-photochemically reactive cleanup material employed:
 - a. the volatile organic compound (VOC) content of each non-photochemically cleanup materials, in lbs/gallon as applied;
 - b. the number of gallons of cleanup material employed minus the number of gallons of cleanup material recovered for disposal;
 - c. the total VOC emissions from all non-photochemically cleanup materials employed, in lbs/month, i.e., sum of (a) times (b);
5. The permittee shall collect and record the following information each month for emissions units R001, R002, and R003, combined:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the single Hazardous Air Pollutant (HAP)¹ content for each HAP of each coating and cleanup material, in pounds of individual HAP per gallon of coating, as applied;

- d. the total single HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month, i.e., for each HAP the sum of (b) times (c) for each coating and cleanup material divided by 2000; and
- e. the rolling, 12-month summation of the emissions of each single HAP from emissions units R001, R002, and R003, combined for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the cumulative emissions from R001, R002 and R003, combined, i.e., the summation of (d) in tons per rolling, 12-month period.

¹A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

- 6. The permittee shall record each month the rolling, 12-month summation of VOC emissions from this emissions unit for the previous 12-month period, and during the first 12 calendar months of operation following the issuance of the permit to install, the summation of VOC emissions, i.e., the sum of 2.h plus 3.e plus 4.c divided by 2000 for the previous 12-month period.
- 7. The permit to install for this emissions unit, R002, and R001, R002and R003, combined, 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: n-butyl acetate

TLV (mg/m³): 712

Maximum Hourly Emission Rate (lbs/hr): 16.0

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 9,289

MAGLC (ug/m³): 16,968

8. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

9. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Director in writing of any daily record showing that the dry filters were not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Northeast District Office) within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. for the days during which a photochemically reactive coatings or cleanup materials were employed, each day during which the OC emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds per hour and/or 40 pounds per day, and the actual OC emissions for each such incidence;
 - b. for days photochemically reactive coatings and cleanup materials are not employed, an identification of each day that the average VOC emissions from the coatings exceeded 12.0 lbs/hr in this emissions unit, and the actual average VOC emissions for each such day;
 - c. an identification of each day during which the VOC content of any coating exceeded 4.6 pounds per gallon in this emissions unit and the actual VOC content of each such coating employed;
 - d. all exceedances of the rolling 12-month emissions limitation for each single HAP and, during the first 12 months of operation, all exceedances of each single HAP cumulative emission limitation for emissions units R001, R002, and R003, combined; and
 - e. all exceedances of the rolling, 12-month VOC emission limitation for this emissions unit.

The quarterly deviations reports shall be submitted in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

4. The permittee shall also submit annual reports that summarize the following information:
 - a. the emissions of VOC from this emissions unit; and
 - b. the emissions of each single HAP from this emissions unit and from emissions units R001, R002, and R003, combined.

The reports shall include the emissions calculations, shall be submitted by January 31 of each year, and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the allowable emission limitations in Section A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
8 pounds per hour of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.2.f. based upon the record keeping specified in Section C.2.
 - b. Emissions Limitation:
40 pounds per day of OC emissions for each day that photochemically reactive materials are employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.2.d. based upon the record keeping specified in Section C.2.
 - c. Emissions Limitation:
12.0 pounds VOC emissions per hour for each day that photochemically reactive materials are not employed.

Applicable Compliance Method:
Compliance shall be determined by the daily values calculated in C.3.g. based on the record keeping specified in Section C.3.
 - d. Emissions Limitation:
26.2 tons of VOC emissions per rolling, 12-month period from all coatings and cleanup materials

Applicable Compliance Method:
Compliance shall be determined by the value recorded in C.7 based on the record keeping as specified in Section C.2, C.3 and C.4.

- e. Emissions Limitation:
4.6 pound of VOC per gallon coating

Applicable Compliance Method:
Compliance shall be determined by the daily values recorded according to C.2.g and C.3.c.
- f. Emissions Limitations:
9.9 tons of each single HAP, based upon a rolling, 12-month summation for R001, R002, and R003, combined.

Applicable Compliance Method:
Compliance shall be based on the record keeping as specified in Sections C.5.e.

- 2. Any determination of VOC content, solids contents, or density of coating material shall be based on the coating materials as employed (as applied), including the addition of any thinner or viscosity reducer to the coatings. The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating materials, or from data determined by an analysis of each coating, as applied, by Reference Method 24. Ohio EPA may require the permittee, if it uses formulation data supplied by the manufacturer, to determine data used in the calculation of the VOC content of coating materials by Reference Method 24 or an equivalent or alternative method.

US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

F. Miscellaneous Requirements

- 1. In accordance with the provisions of OAC rule 3745-35-07, the following terms and conditions of this permit to install are federally enforceable: A-F, except C7, C.8 and C.9.