



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

**RE: FINAL PERMIT TO INSTALL  
CUYAHOGA COUNTY  
Application No: 13-04655  
Fac ID: 1318038490**

**CERTIFIED MAIL**

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

**DATE: 10/5/2006**

Taylor Chair Company  
Brett Meals  
1 Taylor Parkway  
Bedford, OH 44146

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 of the Director is final 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 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  
309 South Fourth Street, Room 222  
Columbus, OH 43215

Sincerely,

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



**Permit To Install  
Terms and Conditions**

**Issue Date: 10/5/2006  
Effective Date: 10/5/2006**

**FINAL PERMIT TO INSTALL 13-04655**

Application Number: 13-04655  
Facility ID: 1318038490  
Permit Fee: **\$1000**  
Name of Facility: Taylor Chair Company  
Person to Contact: Brett Meals  
Address: 1 Taylor Parkway  
Bedford, OH 44146

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1 Taylor Parkway  
Bedford, Ohio**

Description of proposed emissions unit(s):  
**Spray Booths 4-8 -- K004 - K008.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

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

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

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

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

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

The permittee shall submit required reports in the following manner:

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

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

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

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

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

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

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

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

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

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

**14. Construction Compliance Certification**

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

**15. Fees**

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

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

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

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

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| OC               | 96.0 (facility)      |
| Single HAP       | 9.0(facility)        |
| Total HAPs       | 20.0(facility)       |

**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>   |
|---|--|--|
| K004 - Chair Shading/Inspection Booth 4       | OAC rule 3745-31-05(A)(3)  | 7.31 lbs/organic compound (OC)/hr and 13.68 tons per year (TPY) OC from coatings/adhesives.<br><br>0.06 TPY OC from cleanup materials.<br><br>The requirements of this rule also include compliance with OAC rules 3745-21-07(G)(2) and 3745-31-05(C). |
|   | OAC rule 3745-21-07(G)(2)  | Exempt. See A.2.a below.   |
|   | OAC rule 3745-31-05(C)<br>Synthetic Minor to avoid Title V, MACT subpart JJ, and Nonattainment NSR | See A.2.b, A.2.c, and B.2 below.   |

**2. Additional Terms and Conditions**

- 2.a The permittee shall not use photochemically reactive materials as coatings, adhesives or for cleanup purposes in this emissions unit and shall comply with the above cited hourly and annual limitations as BAT.
- 2.b The emissions of hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP and 20.0 TPY for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAP material usage rates.

- 2.c OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 TPY based upon a rolling, 12-month summation of emissions.

**B. Operational Restrictions**

- 1. The permittee shall operate the fiberglass filtration system whenever the emissions unit is in operation.
- 2. The maximum annual operating hours for each emissions unit shall not exceed 3744, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours per Booth</u> |
|-----------------|---|
| 1               | 312   |
| 1-2             | 624   |
| 1-3             | 936   |
| 1-4             | 1284  |
| 1-5             | 1560  |
| 1-6             | 1872  |
| 1-7             | 2184  |
| 1-8             | 2496  |
| 1-9             | 2808  |
| 1-10            | 3120  |
| 1-11            | 3432  |
| 1-12            | 3744  |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

**C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records and document any time periods when the dry exhaust filtration system was not in service when this emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating/adhesive and cleanup material employed;

- b. the amount, in gallons, of each coating/adhesive and cleanup material employed;
- c. the number of hours that the emissions unit operates;
- d. the organic compound content of each coating/adhesive and cleanup material, in pounds per gallon;
- e. the amount, in gallons, of cleanup material that is contained for disposal;
- f. the total organic compound emission rate for all coatings/adhesives, in pounds per day [sum of b x d];
- g. the total organic compound emissions rate for all cleanup materials, in pounds per day [sum of d(b -e)]; and
- h. the average hourly organic compound emission rate for all coatings/adhesives, in pounds per hour [f / c].

[Note: The coating/adhesive information must be for the coatings/adhesives as employed, including any thinning solvents added at the emissions unit.]

- 3. The permittee shall record the sum of the daily emissions determined from C.2.f and C.2.g above for the purpose of determining annual organic compound emissions from coatings/adhesives and cleanup materials.
- 4. The permittee shall collect and record from emissions units K001, K002, K003, K004, K005, K006, K007, and K008, on a monthly basis, the rolling, 12-month summation of OC emissions in tons per year for all coatings/adhesives and cleanup materials. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.
- 5. The permittee shall maintain monthly records beginning after the first 12 calendar months of operation of the first 12 calendar months following the issuance of this permit, the rolling 12-month summation of the operating hours. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.
- 6. The permittee shall collect and record the following information each month for the entire facility (includes emissions units K001, K002, K003, K004, K005, K006, K007, and K008):
  - a. the name and identification number of each HAP containing material employed;

- b. the individual HAP content for each HAP, in pounds of individual HAP per pound of material;
- c. the total combined HAP content, in pounds of combined HAPs per pound of material [sum of all the individual HAP contents from b];
- d. the number of pounds of each HAP containing material employed;
- e. the total individual HAP usage for each HAP from all HAP containing material, in pounds or tons per month [for each HAP, the sum of (b x d) for each material];
- f. the total combined HAP usage from all HAP containing materials, in pounds or tons per month [the sum of c x d) for each material];
- g. the updated rolling, 12-month summation of usage for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- h. the updated rolling, 12-month summation of usage for total combined HAPs, in pounds or tons. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). This information does not have to be kept on an individual basis.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone  
TLV (mg/m<sup>3</sup>): 1187.12  
Maximum Hourly Emission Rate (lbs/hr): 2.9  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 312.91

MAGLC (ug/m3): 28265

Pollutant: Amyl Acetate  
TLV (mg/m3): 266.26  
Maximum Hourly Emission Rate (lbs/hr): 0.77  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83.08  
MAGLC (ug/m3): 6339

Pollutant: 1-Butanol  
TLV (mg/m3): 60.63  
Maximum Hourly Emission Rate (lbs/hr): 1.24  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133.80  
MAGLC (ug/m3): 1444

Pollutant: n-Butyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 3.25  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 350.68  
MAGLC (ug/m3): 16968

Pollutant: Ethanol  
TLV (mg/m3): 1884.25  
Maximum Hourly Emission Rate (lbs/hr): 1.02  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110.06  
MAGLC (ug/m3): 44863

Pollutant: Isobutyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 7.09  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 765.01  
MAGLC (ug/m3): 16968

Pollutant: MAK  
TLV (mg/m3): 233.5  
Maximum Hourly Emission Rate (lbs/hr): 0.66  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71.21  
MAGLC (ug/m3): 5559

Pollutant: MEK  
TLV (mg/m3): 589.78  
Maximum Hourly Emission Rate (lbs/hr): 1.49  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160.77  
MAGLC (ug/m3): 14042

Pollutant: 2-Methyl-1-Propanol

TLV (mg/m3): 151.57  
Maximum Hourly Emission Rate (lbs/hr): 4.3  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 463.97  
MAGLC (ug/m3): 3609

Pollutant: 1-Methoxy-2-Propanol  
TLV (mg/m3): 368.59  
Maximum Hourly Emission Rate (lbs/hr): 4.12  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 444.55  
MAGLC (ug/m3): 8776

Pollutant: 2-Propanol  
TLV (mg/m3): 491.53  
Maximum Hourly Emission Rate (lbs/hr): 1.14  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123.01  
MAGLC (ug/m3): 11703

Pollutant: Toluene  
TLV (mg/m3): 188.4  
Maximum Hourly Emission Rate (lbs/hr): 2.8  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 302.12  
MAGLC (ug/m3): 4486

Pollutant: Xylene  
TLV (mg/m3): 434.2  
Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 142.43  
MAGLC (ug/m3): 10338

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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

- 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.)
9. 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.

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

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

- 1. The permittee shall submit quarterly deviation reports that identify all periods of time during which the filtration system was not in service when the emissions unit was in operation.
- 2. The permittee shall submit quarterly deviation (excursion) reports to the CDAQ which include the following information: an identification of each day during which the average hourly organic compound emissions from coatings/adhesives exceeded 7.31 pounds per hour, and the actual average hourly organic compound emission rate for each such day.
- 3. The permittee shall also submit annual reports which specify the total organic compound emissions from coatings/adhesives and cleanup materials from this

emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for OC. This written report shall be submitted to the Cleveland Division of Air Quality within 30 days of the occurrence of the deviation.
6. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month individual HAP emissions for each such month;
  - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 20.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month combined HAP emissions for each such month; and
  - c. for the first 12 calendar months of operation following the issuance of this permit reports shall be submitted identifying all exceedances of the maximum allowable cumulative HAP usage and emissions rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. **Emission Limitation**  
7.31 lbs OC/hr from coatings/adhesives

### **Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.2 and D.2 above, respectively.

- b. **Emission Limitation**  
0.06 TPY OC from cleanup material
- Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.
- c. **Emission Limitation**  
13.68 TPY OC from coatings/adhesives
- Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.
- d. **Emission Limitation**  
OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.
- Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.4 and D.5 above, respectively.
- e. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP.
- Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.
- f. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 20.0 TPY for any combination of HAPs.
- Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.
2. Formulation data or U.S. EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC content of the coatings/adhesives and cleanup materials. The CDAQ or Ohio EPA may require that U.S. EPA Method 24 be used to determine the OC content of the coatings/adhesives and cleanup materials. If an owner or operator determines that Method 24 cannot be used for a particular coating/adhesive or cleanup material, the permittee shall so notify the administrator of the U.S. EPA and shall use

formulation data for that coating, adhesive, or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

**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>   |
|---|--|--|
| K005 - Desk Stain Booth 5                     | OAC rule 3745-31-05(A)(3)  | 7.31 lbs/organic compound (OC)/hr and 13.68 tons per year (TPY) OC from coatings/adhesives.<br><br>0.06 TPY OC from cleanup materials.<br><br>The requirements of this rule also include compliance with OAC rules 3745-21-07(G)(2) and 3745-31-05(C). |
|   | OAC rule 3745-21-07(G)(2)  | Exempt. See A.2.a below.   |
|   | OAC rule 3745-31-05(C)<br>Synthetic Minor to avoid Title V, MACT subpart JJ, and Nonattainment NSR | See A.2.b, A.2.c, and B.2 below.   |

**2. Additional Terms and Conditions**

- 2.a The permittee shall not use photochemically reactive materials as coatings, adhesives or for cleanup purposes in this emissions unit and shall comply with the above cited hourly and annual limitations as BAT.
- 2.b The emissions of hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP and 20.0 TPY for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAP material usage rates.

- 2.c** OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**B. Operational Restrictions**

- 1. The permittee shall operate the fiberglass filtration system whenever the emissions unit is in operation.
- 2. The maximum annual operating hours for each emissions unit shall not exceed 3744, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours per Booth</u> |
|-----------------|---|
| 1               | 312   |
| 1-2             | 624   |
| 1-3             | 936   |
| 1-4             | 1284  |
| 1-5             | 1560  |
| 1-6             | 1872  |
| 1-7             | 2184  |
| 1-8             | 2496  |
| 1-9             | 2808  |
| 1-10            | 3120  |
| 1-11            | 3432  |
| 1-12            | 3744  |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

**C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records and document any time periods when the dry exhaust filtration system was not in service when this emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating/adhesive and cleanup material employed;

- b. the amount, in gallons, of each coating/adhesive and cleanup material employed;
- c. the number of hours that the emissions unit operates;
- d. the organic compound content of each coating/adhesive and cleanup material, in pounds per gallon;
- e. the amount, in gallons, of cleanup material that is contained for disposal;
- f. the total organic compound emission rate for all coatings/adhesives, in pounds per day [sum of b x d];
- g. the total organic compound emissions rate for all cleanup materials, in pounds per day [sum of d(b -e)]; and
- h. the average hourly organic compound emission rate for all coatings/adhesives, in pounds per hour [f / c].

[Note: The coating/adhesive information must be for the coatings/adhesives as employed, including any thinning solvents added at the emissions unit.]

- 3. The permittee shall record the sum of the daily emissions determined from C.2.f and C.2.g above for the purpose of determining annual organic compound emissions from coatings/adhesives and cleanup materials.
- 4. The permittee shall collect and record from emissions units K001, K002, K003, K004, K005, K006, K007, and K008, on a monthly basis, the rolling, 12-month summation of OC emissions in tons per year for all coatings/adhesives and cleanup materials. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.
- 5. The permittee shall maintain monthly records beginning after the first 12 calendar months of operation of the first 12 calendar months following the issuance of this permit, the rolling 12-month summation of the operating hours. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.
- 6. The permittee shall collect and record the following information each month for the entire facility (includes emissions units K001, K002, K003, K004, K005, K006, K007, and K008):
  - a. the name and identification number of each HAP containing material employed;
  - b. the individual HAP content for each HAP, in pounds of individual HAP per pound of material;

- c. the total combined HAP content, in pounds of combined HAPs per pound of material [sum of all the individual HAP contents from b];
- d. the number of pounds of each HAP containing material employed;
- e. the total individual HAP usage for each HAP from all HAP containing material, in pounds or tons per month [for each HAP, the sum of (b x d) for each material];
- f. the total combined HAP usage from all HAP containing materials, in pounds or tons per month [the sum of c x d) for each material];
- g. the updated rolling, 12-month summation of usage for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- h. the updated rolling, 12-month summation of usage for total combined HAPs, in pounds or tons. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). This information does not have to be kept on an individual basis.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone  
TLV (mg/m<sup>3</sup>): 1187.12  
Maximum Hourly Emission Rate (lbs/hr): 2.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 312.91  
MAGLC (ug/m3): 28265

Pollutant: Amyl Acetate  
TLV (mg/m3): 266.26  
Maximum Hourly Emission Rate (lbs/hr): 0.77  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83.08  
MAGLC (ug/m3): 6339

Pollutant: 1-Butanol  
TLV (mg/m3): 60.63  
Maximum Hourly Emission Rate (lbs/hr): 1.24  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133.80  
MAGLC (ug/m3): 1444

Pollutant: n-Butyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 3.25  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 350.68  
MAGLC (ug/m3): 16968

Pollutant: Ethanol  
TLV (mg/m3): 1884.25  
Maximum Hourly Emission Rate (lbs/hr): 1.02  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110.06  
MAGLC (ug/m3): 44863

Pollutant: Isobutyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 7.09  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 765.01  
MAGLC (ug/m3): 16968

Pollutant: MAK  
TLV (mg/m3): 233.5  
Maximum Hourly Emission Rate (lbs/hr): 0.66  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71.21  
MAGLC (ug/m3): 5559

Pollutant: MEK  
TLV (mg/m3): 589.78  
Maximum Hourly Emission Rate (lbs/hr): 1.49  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160.77  
MAGLC (ug/m3): 14042

Pollutant: 2-Methyl-1-Propanol  
TLV (mg/m3): 151.57  
Maximum Hourly Emission Rate (lbs/hr): 4.3  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 463.97  
MAGLC (ug/m3): 3609

Pollutant: 1-Methoxy-2-Propanol  
TLV (mg/m3): 368.59  
Maximum Hourly Emission Rate (lbs/hr): 4.12  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 444.55  
MAGLC (ug/m3): 8776

Pollutant: 2-Propanol  
TLV (mg/m3): 491.53  
Maximum Hourly Emission Rate (lbs/hr): 1.14  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123.01  
MAGLC (ug/m3): 11703

Pollutant: Toluene  
TLV (mg/m3): 188.4  
Maximum Hourly Emission Rate (lbs/hr): 2.8  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 302.12  
MAGLC (ug/m3): 4486

Pollutant: Xylene  
TLV (mg/m3): 434.2  
Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 142.43  
MAGLC (ug/m3): 10338

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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and

- BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.)
9. 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.

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

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

1. The permittee shall submit quarterly deviation reports that identify all periods of time during which the filtration system was not in service when the emissions unit was in operation.
2. The permittee shall submit quarterly deviation (excursion) reports to the CDAQ which include the following information: an identification of each day during which the average hourly organic compound emissions from coatings/adhesives exceeded 7.31 pounds per hour, and the actual average hourly organic compound emission rate for each such day.

3. The permittee shall also submit annual reports which specify the total organic compound emissions from coatings/adhesives and cleanup materials from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for OC. This written report shall be submitted to the Cleveland Division of Air Quality within 30 days of the occurrence of the deviation.
6. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month individual HAP emissions for each such month;
  - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 20.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month combined HAP emissions for each such month; and
  - c. for the first 12 calendar months of operation following the issuance of this permit reports shall be submitted identifying all exceedances of the maximum allowable cumulative HAP usage and emissions rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. **Emission Limitation**  
7.31 lbs OC/hr from coatings/adhesives

### **Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.2 and D.2 above, respectively.

- b. **Emission Limitation**  
0.06 TPY OC from cleanup material

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- c. **Emission Limitation**  
13.68 TPY OC from coatings/adhesives

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- d. **Emission Limitation**  
OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.4 and D.5 above, respectively.

- e. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

- f. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 20.0 TPY for any combination of HAPs.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

2. Formulation data or U.S. EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC content of the coatings/adhesives and cleanup materials. The CDAQ or Ohio EPA may require that U.S. EPA Method 24 be used to determine the OC

content of the coatings/adhesives and cleanup materials. If an owner or operator determines that Method 24 cannot be used for a particular coating/adhesive or cleanup material, the permittee shall so notify the administrator of the U.S. EPA and shall use formulation data for that coating, adhesive, or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

**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>   |
|---|---|--|
| K006 - Desk Sealer Booth 6                    | OAC rule 3745-31-05(A)(3)   | 7.31 lbs/organic compound (OC)/hr and 13.68 tons per year (TPY) OC from coatings/adhesives.              |
|   |   | 0.06 TPY OC from cleanup materials.  |
|   |   | The requirements of this rule also include compliance with OAC rules 3745-21-07(G)(2) and 3745-31-05(C). |
|   | OAC rule 3745-21-07(G)(2)   | Exempt. See A.2.a. below.  |
|   | OAC rule 3745-31-05(C)<br>Synthetic Minor to avoid Title V, MACT subpart JJ, and Nonattainment NSR. | See A.2.b, A.2.c, and B.2 below.   |

**2. Additional Terms and Conditions**

- 2.a The permittee shall not use photochemically reactive materials as coatings, adhesives or for cleanup purposes in this emissions unit and shall comply with the above cited hourly and annual limitations as BAT.
- 2.b The emissions of hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP and 20.0 TPY for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAP material usage rates.

- 2.c OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**B. Operational Restrictions**

- 1. The permittee shall operate the fiberglass filtration system whenever the emissions unit is in operation.
- 2. The maximum annual operating hours for each emissions unit shall not exceed 3744, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours per Booth</u> |
|-----------------|---|
| 1               | 312   |
| 1-2             | 624   |
| 1-3             | 936   |
| 1-4             | 1284  |
| 1-5             | 1560  |
| 1-6             | 1872  |
| 1-7             | 2184  |
| 1-8             | 2496  |
| 1-9             | 2808  |
| 1-10            | 3120  |
| 1-11            | 3432  |
| 1-12            | 3744  |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

**C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records and document any time periods when the dry exhaust filtration system was not in service when this emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating/adhesive and cleanup material employed;

- b. the amount, in gallons, of each coating/adhesive and cleanup material employed;
- c. the number of hours that the emissions unit operates;
- d. the organic compound content of each coating/adhesive and cleanup material, in pounds per gallon;
- e. the amount, in gallons, of cleanup material that is contained for disposal;
- f. the total organic compound emission rate for all coatings/adhesives, in pounds per day [sum of b x d];
- g. the total organic compound emissions rate for all cleanup materials, in pounds per day [sum of d(b -e)]; and
- h. the average hourly organic compound emission rate for all coatings/adhesives, in pounds per hour [f / c].

[Note: The coating/adhesive information must be for the coatings/adhesives as employed, including any thinning solvents added at the emissions unit.]

- 3. The permittee shall record the sum of the daily emissions determined from C.2.f and C.2.g above for the purpose of determining annual organic compound emissions from coatings/adhesives and cleanup materials.
- 4. The permittee shall collect and record from emissions units K001, K002, K003, K004, K005, K006, K007, and K008, on a monthly basis, the rolling, 12-month summation of OC emissions in tons per year for all coatings/adhesives and cleanup materials. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.
- 5. The permittee shall maintain monthly records beginning after the first 12 calendar months of operation of the first 12 calendar months following the issuance of this permit, the rolling 12-month summation of the operating hours. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.
- 6. The permittee shall collect and record the following information each month for the entire facility (includes emissions units K001, K002, K003, K004, K005, K006, K007, and K008):
  - a. the name and identification number of each HAP containing material employed;
  - b. the individual HAP content for each HAP, in pounds of individual HAP per pound of material;

- c. the total combined HAP content, in pounds of combined HAPs per pound of material [sum of all the individual HAP contents from b];
- d. the number of pounds of each HAP containing material employed;
- e. the total individual HAP usage for each HAP from all HAP containing material, in pounds or tons per month [for each HAP, the sum of (b x d) for each material];
- f. the total combined HAP usage from all HAP containing materials, in pounds or tons per month [the sum of c x d) for each material];
- g. the updated rolling, 12-month summation of usage for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- h. the updated rolling, 12-month summation of usage for total combined HAPs, in pounds or tons. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). This information does not have to be kept on an individual basis.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone  
TLV (mg/m3): 1187.12  
Maximum Hourly Emission Rate (lbs/hr): 2.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 312.91

MAGLC (ug/m3): 28265

Pollutant: Amyl Acetate  
TLV (mg/m3): 266.26  
Maximum Hourly Emission Rate (lbs/hr): 0.77  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83.08  
MAGLC (ug/m3): 6339

Pollutant: 1-Butanol  
TLV (mg/m3): 60.63  
Maximum Hourly Emission Rate (lbs/hr): 1.24  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133.80  
MAGLC (ug/m3): 1444

Pollutant: n-Butyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 3.25  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 350.68  
MAGLC (ug/m3): 16968

Pollutant: Ethanol  
TLV (mg/m3): 1884.25  
Maximum Hourly Emission Rate (lbs/hr): 1.02  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110.06  
MAGLC (ug/m3): 44863

Pollutant: Isobutyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 7.09  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 765.01  
MAGLC (ug/m3): 16968

Pollutant: MAK  
TLV (mg/m3): 233.5  
Maximum Hourly Emission Rate (lbs/hr): 0.66  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71.21  
MAGLC (ug/m3): 5559

Pollutant: MEK  
TLV (mg/m3): 589.78  
Maximum Hourly Emission Rate (lbs/hr): 1.49  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160.77  
MAGLC (ug/m3): 14042

Pollutant: 2-Methyl-1-Propanol  
TLV (mg/m3): 151.57

Maximum Hourly Emission Rate (lbs/hr): 4.3  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 463.97  
MAGLC (ug/m3): 3609

Pollutant: 1-Methoxy-2-Propanol  
TLV (mg/m3): 368.59  
Maximum Hourly Emission Rate (lbs/hr): 4.12  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 444.55  
MAGLC (ug/m3): 8776

Pollutant: 2-Propanol  
TLV (mg/m3): 491.53  
Maximum Hourly Emission Rate (lbs/hr): 1.14

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123.01  
MAGLC (ug/m3): 11703

Pollutant: Toluene  
TLV (mg/m3): 188.4  
Maximum Hourly Emission Rate (lbs/hr): 2.8  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 302.12  
MAGLC (ug/m3): 4486

Pollutant: Xylene  
TLV (mg/m3): 434.2  
Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 142.43  
MAGLC (ug/m3): 10338

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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

- 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.)
9. 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.

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

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

- 1. The permittee shall submit quarterly deviation reports that identify all periods of time during which the filtration system was not in service when the emissions unit was in operation.
- 2. The permittee shall submit quarterly deviation (excursion) reports to the CDAQ which include the following information: an identification of each day during which the average hourly organic compound emissions from coatings/adhesives exceeded 7.31 pounds per hour, and the actual average hourly organic compound emission rate for each such day.
- 3. The permittee shall also submit annual reports which specify the total organic compound emissions from coatings/adhesives and cleanup materials from this

emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for OC. This written report shall be submitted to the Cleveland Division of Air Quality within 30 days of the occurrence of the deviation.
6. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month individual HAP emissions for each such month;
  - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 20.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month combined HAP emissions for each such month; and
  - c. for the first 12 calendar months of operation following the issuance of this permit reports shall be submitted identifying all exceedances of the maximum allowable cumulative HAP usage and emissions rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. **Emission Limitation**  
7.31 lbs OC/hr from coatings/adhesives

### **Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.2 and D.2 above, respectively.

- b. **Emission Limitation**  
0.06 TPY OC from cleanup material

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- c. **Emission Limitation**  
13.68 TPY OC from coatings/adhesives

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- d. **Emission Limitation**  
OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.4 and D.5 above, respectively.

- e. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

- f. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 20.0 TPY for any combination of HAPs.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

- 2. Formulation data or U.S. EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC content of the coatings/adhesives and cleanup materials. The CDAQ or Ohio EPA may require that U.S. EPA Method 24 be used to determine the OC

content of the coatings/adhesives and cleanup materials. If an owner or operator determines that Method 24 cannot be used for a particular coating/adhesive or cleanup material, the permittee shall so notify the administrator of the U.S. EPA and shall use formulation data for that coating, adhesive, or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

**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>   |
|---|---|--|
| K007 - Desk Top Coat Booth 7                  | OAC rule 3745-31-05(A)(3)   | 7.31 lbs/organic compound (OC)/hr and 13.68 tons per year (TPY) OC from coatings/adhesives.<br><br>0.06 TPY OC from cleanup materials.<br><br>The requirements of this rule also include compliance with OAC rules 3745-21-07(G)(2) and 3745-31-05(C). |
|   | OAC rule 3745-21-07(G)(2)   | Exempt. See A.2.a. below.  |
|   | OAC rule 3745-31-05(C)<br>Synthetic Minor to avoid Title V, MACT subpart JJ, and Nonattainment NSR. | See A.2.b, A.2.c, and B.2 below.   |

**2. Additional Terms and Conditions**

- 2.a The permittee shall not use photochemically reactive materials as coatings, adhesives or for cleanup purposes in this emissions unit and shall comply with the above cited hourly and annual limitations as BAT.
- 2.b The emissions of hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP and 20.0 TPY for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAP material usage rates.

- 2.c OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**B. Operational Restrictions**

- 1. The permittee shall operate the fiberglass filtration system whenever the emissions unit is in operation.
- 2. The maximum annual operating hours for each emissions unit shall not exceed 3744, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours per Booth</u> |
|-----------------|---|
| 1               | 312   |
| 1-2             | 624   |
| 1-3             | 936   |
| 1-4             | 1284  |
| 1-5             | 1560  |
| 1-6             | 1872  |
| 1-7             | 2184  |
| 1-8             | 2496  |
| 1-9             | 2808  |
| 1-10            | 3120  |
| 1-11            | 3432  |
| 1-12            | 3744  |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

**C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records and document any time periods when the dry exhaust filtration system was not in service when this emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating/adhesive and cleanup material employed;

- b. the amount, in gallons, of each coating/adhesive and cleanup material employed;
- c. the number of hours that the emissions unit operates;
- d. the organic compound content of each coating/adhesive and cleanup material, in pounds per gallon;
- e. the amount, in gallons, of cleanup material that is contained for disposal;
- f. the total organic compound emission rate for all coatings/adhesives, in pounds per day [sum of b x d];
- g. the total organic compound emissions rate for all cleanup materials, in pounds per day [sum of d(b -e)]; and
- h. the average hourly organic compound emission rate for all coatings/adhesives, in pounds per hour [f / c].

[Note: The coating/adhesive information must be for the coatings/adhesives as employed, including any thinning solvents added at the emissions unit.]

- 3. The permittee shall record the sum of the daily emissions determined from C.2.f and C.2.g above for the purpose of determining annual organic compound emissions from coatings/adhesives and cleanup materials.
- 4. The permittee shall collect and record from emissions units K001, K002, K003, K004, K005, K006, K007, and K008, on a monthly basis, the rolling, 12-month summation of OC emissions in tons per year for all coatings/adhesives and cleanup materials. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.
- 5. The permittee shall maintain monthly records beginning after the first 12 calendar months of operation of the first 12 calendar months following the issuance of this permit, the rolling 12-month summation of the operating hours. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.
- 6. The permittee shall collect and record the following information each month for the entire facility (includes emissions units K001, K002, K003, K004, K005, K006, K007, and K008):
  - a. the name and identification number of each HAP containing material employed;
  - b. the individual HAP content for each HAP, in pounds of individual HAP per pound of material;

- c. the total combined HAP content, in pounds of combined HAPs per pound of material [sum of all the individual HAP contents from b];
- d. the number of pounds of each HAP containing material employed;
- e. the total individual HAP usage for each HAP from all HAP containing material, in pounds or tons per month [for each HAP, the sum of (b x d) for each material];
- f. the total combined HAP usage from all HAP containing materials, in pounds or tons per month [the sum of c x d) for each material];
- g. the updated rolling, 12-month summation of usage for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- h. the updated rolling, 12-month summation of usage for total combined HAPs, in pounds or tons. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). This information does not have to be kept on an individual basis.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone  
TLV (mg/m3): 1187.12  
Maximum Hourly Emission Rate (lbs/hr): 2.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 312.91

MAGLC (ug/m3): 28265

Pollutant: Amyl Acetate

TLV (mg/m3): 266.26

Maximum Hourly Emission Rate (lbs/hr): 0.77

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83.08

MAGLC (ug/m3): 6339

Pollutant: 1-Butanol

TLV (mg/m3): 60.63

Maximum Hourly Emission Rate (lbs/hr): 1.24

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133.80

MAGLC (ug/m3): 1444

Pollutant: n-Butyl Acetate

TLV (mg/m3): 712.64

Maximum Hourly Emission Rate (lbs/hr): 3.25

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 350.68

MAGLC (ug/m3): 16968

Pollutant: Ethanol

TLV (mg/m3): 1884.25

Maximum Hourly Emission Rate (lbs/hr): 1.02

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110.06

MAGLC (ug/m3): 44863

Pollutant: Isobutyl Acetate

TLV (mg/m3): 712.64

Maximum Hourly Emission Rate (lbs/hr): 7.09

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 765.01

MAGLC (ug/m3): 16968

Pollutant: MAK

TLV (mg/m3): 233.5

Maximum Hourly Emission Rate (lbs/hr): 0.66

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71.21

MAGLC (ug/m3): 5559

Pollutant: MEK

TLV (mg/m3): 589.78

Maximum Hourly Emission Rate (lbs/hr): 1.49

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160.77

MAGLC (ug/m3): 14042

Pollutant: 2-Methyl-1-Propanol

TLV (mg/m3): 151.57

Maximum Hourly Emission Rate (lbs/hr): 4.3  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 463.97  
MAGLC (ug/m3): 3609

Pollutant: 1-Methoxy-2-Propanol  
TLV (mg/m3): 368.59  
Maximum Hourly Emission Rate (lbs/hr): 4.12  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 444.55  
MAGLC (ug/m3): 8776

Pollutant: 2-Propanol  
TLV (mg/m3): 491.53  
Maximum Hourly Emission Rate (lbs/hr): 1.14  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123.01  
MAGLC (ug/m3): 11703

Pollutant: Toluene  
TLV (mg/m3): 188.4  
Maximum Hourly Emission Rate (lbs/hr): 2.8  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 302.12  
MAGLC (ug/m3): 4486

Pollutant: Xylene  
TLV (mg/m3): 434.2  
Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 142.43  
MAGLC (ug/m3): 10338

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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

- 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.)
9. 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.

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

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

- 1. The permittee shall submit quarterly deviation reports that identify all periods of time during which the filtration system was not in service when the emissions unit was in operation.
- 2. The permittee shall submit quarterly deviation (excursion) reports to the CDAQ which include the following information: an identification of each day during which the average hourly organic compound emissions from coatings/adhesives exceeded 7.31 pounds per hour, and the actual average hourly organic compound emission rate for each such day.
- 3. The permittee shall also submit annual reports which specify the total organic compound emissions from coatings/adhesives and cleanup materials from this

emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for OC. This written report shall be submitted to the Cleveland Division of Air Quality within 30 days of the occurrence of the deviation.
6. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month individual HAP emissions for each such month;
  - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 20.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month combined HAP emissions for each such month; and
  - c. for the first 12 calendar months of operation following the issuance of this permit reports shall be submitted identifying all exceedances of the maximum allowable cumulative HAP usage and emissions rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. **Emission Limitation**  
7.31 lbs OC/hr from coatings/adhesives

### **Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.2 and D.2 above, respectively.

- b. **Emission Limitation**  
0.06 TPY OC from cleanup material

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- c. **Emission Limitation**  
13.68 TPY OC from coatings/adhesives

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.

- d. **Emission Limitation**  
OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.4 and D.5 above, respectively.

- e. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

- f. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 20.0 TPY for any combination of HAPs.

**Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.

2. Formulation data or U.S. EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC content of the coatings/adhesives and cleanup materials. The CDAQ or Ohio EPA may require that U.S. EPA Method 24 be used to determine the OC content of the coatings/adhesives and cleanup materials. If an owner or operator determines that Method 24 cannot be used for a particular coating/adhesive or cleanup material, the permittee shall so notify the administrator of the U.S. EPA and shall use

formulation data for that coating, adhesive, or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

**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>   |
|---|---|--|
| K008 - Chair Sealer Booth 2                   | OAC rule 3745-31-05(A)(3)   | 7.31 lbs/organic compound (OC)/hr and 13.68 tons per year (TPY) OC from coatings/adhesives.              |
|   |   | 0.06 TPY OC from cleanup materials.  |
|   |   | The requirements of this rule also include compliance with OAC rules 3745-21-07(G)(2) and 3745-31-05(C). |
|   | OAC rule 3745-21-07(G)(2)   | Exempt. See A.2.a. below.  |
|   | OAC rule 3745-31-05(C)<br>Synthetic Minor to avoid Title V, MACT subpart JJ, and Nonattainment NSR. | See A.2.b, A.2.c, and B.2 below.   |

**2. Additional Terms and Conditions**

- 2.a The permittee shall not use photochemically reactive materials as coatings, adhesives or for cleanup purposes in this emissions unit and shall comply with the above cited hourly and annual limitations as BAT.
- 2.b The emissions of hazardous air pollutants (HAPs) from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP and 20.0 TPY for any combination of HAPs, based upon a rolling, 12-month summation of the monthly HAP material usage rates.

- 2.c OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.

**B. Operational Restrictions**

- 1. The permittee shall operate the fiberglass filtration system whenever the emissions unit is in operation.
- 2. The maximum annual operating hours for each emissions unit shall not exceed 3744, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

| <u>Month(s)</u> | <u>Maximum Allowable Cumulative Operating Hours per Booth</u> |
|-----------------|---|
| 1               | 312   |
| 1-2             | 624   |
| 1-3             | 936   |
| 1-4             | 1284  |
| 1-5             | 1560  |
| 1-6             | 1872  |
| 1-7             | 2184  |
| 1-8             | 2496  |
| 1-9             | 2808  |
| 1-10            | 3120  |
| 1-11            | 3432  |
| 1-12            | 3744  |

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

**C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall maintain daily records and document any time periods when the dry exhaust filtration system was not in service when this emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating/adhesive and cleanup material employed;

- b. the amount, in gallons, of each coating/adhesive and cleanup material employed;
- c. the number of hours that the emissions unit operates;
- d. the organic compound content of each coating/adhesive and cleanup material, in pounds per gallon;
- e. the amount, in gallons, of cleanup material that is contained for disposal;
- f. the total organic compound emission rate for all coatings/adhesives, in pounds per day [sum of b x d];
- g. the total organic compound emissions rate for all cleanup materials, in pounds per day [sum of d(b -e)]; and
- h. the average hourly organic compound emission rate for all coatings/adhesives, in pounds per hour [f / c].

[Note: The coating/adhesive information must be for the coatings/adhesives as employed, including any thinning solvents added at the emissions unit.]

- 3. The permittee shall record the sum of the daily emissions determined from C.2.f and C.2.g above for the purpose of determining annual organic compound emissions from coatings/adhesives and cleanup materials.
- 4. The permittee shall collect and record from emissions units K001, K002, K003, K004, K005, K006, K007, and K008, on a monthly basis, the rolling, 12-month summation of OC emissions in tons per year for all coatings/adhesives and cleanup materials. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.
- 5. The permittee shall maintain monthly records beginning after the first 12 calendar months of operation of the first 12 calendar months following the issuance of this permit, the rolling 12-month summation of the operating hours. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.
- 6. The permittee shall collect and record the following information each month for the entire facility (includes emissions units K001, K002, K003, K004, K005, K006, K007, and K008):
  - a. the name and identification number of each HAP containing material employed;
  - b. the individual HAP content for each HAP, in pounds of individual HAP per pound of material;

- c. the total combined HAP content, in pounds of combined HAPs per pound of material [sum of all the individual HAP contents from b];
- d. the number of pounds of each HAP containing material employed;
- e. the total individual HAP usage for each HAP from all HAP containing material, in pounds or tons per month [for each HAP, the sum of (b x d) for each material];
- f. the total combined HAP usage from all HAP containing materials, in pounds or tons per month [the sum of c x d) for each material];
- g. the updated rolling, 12-month summation of usage for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- h. the updated rolling, 12-month summation of usage for total combined HAPs, in pounds or tons. This shall include information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\*A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Cleveland Division of Air Quality (CDAQ). This information does not have to be kept on an individual basis.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetone  
TLV (mg/m3): 1187.12  
Maximum Hourly Emission Rate (lbs/hr): 2.9

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 312.91

MAGLC (ug/m3): 28265

Pollutant: Amyl Acetate  
TLV (mg/m3): 266.26  
Maximum Hourly Emission Rate (lbs/hr): 0.77  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 83.08  
MAGLC (ug/m3): 6339

Pollutant: 1-Butanol  
TLV (mg/m3): 60.63  
Maximum Hourly Emission Rate (lbs/hr): 1.24  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 133.80  
MAGLC (ug/m3): 1444

Pollutant: n-Butyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 3.25  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 350.68  
MAGLC (ug/m3): 16968

Pollutant: Ethanol  
TLV (mg/m3): 1884.25  
Maximum Hourly Emission Rate (lbs/hr): 1.02  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 110.06  
MAGLC (ug/m3): 44863

Pollutant: Isobutyl Acetate  
TLV (mg/m3): 712.64  
Maximum Hourly Emission Rate (lbs/hr): 7.09  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 765.01  
MAGLC (ug/m3): 16968

Pollutant: MAK  
TLV (mg/m3): 233.5  
Maximum Hourly Emission Rate (lbs/hr): 0.66  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 71.21  
MAGLC (ug/m3): 5559

Pollutant: MEK  
TLV (mg/m3): 589.78  
Maximum Hourly Emission Rate (lbs/hr): 1.49  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160.77  
MAGLC (ug/m3): 14042

Pollutant: 2-Methyl-1-Propanol  
TLV (mg/m3): 151.57

Maximum Hourly Emission Rate (lbs/hr): 4.3  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 463.97  
MAGLC (ug/m3): 3609

Pollutant: 1-Methoxy-2-Propanol  
TLV (mg/m3): 368.59  
Maximum Hourly Emission Rate (lbs/hr): 4.12  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 444.55  
MAGLC (ug/m3): 8776

Pollutant: 2-Propanol  
TLV (mg/m3): 491.53  
Maximum Hourly Emission Rate (lbs/hr): 1.14

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 123.01  
MAGLC (ug/m3): 11703

Pollutant: Toluene  
TLV (mg/m3): 188.4  
Maximum Hourly Emission Rate (lbs/hr): 2.8  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 302.12  
MAGLC (ug/m3): 4486

Pollutant: Xylene  
TLV (mg/m3): 434.2  
Maximum Hourly Emission Rate (lbs/hr): 1.32  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 142.43  
MAGLC (ug/m3): 10338

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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

- 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.)
9. 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.

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

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

- 1. The permittee shall submit quarterly deviation reports that identify all periods of time during which the filtration system was not in service when the emissions unit was in operation.
- 2. The permittee shall submit quarterly deviation (excursion) reports to the CDAQ which include the following information: an identification of each day during which the average hourly organic compound emissions from coatings/adhesives exceeded 7.31 pounds per hour, and the actual average hourly organic compound emission rate for each such day.
- 3. The permittee shall also submit annual reports which specify the total organic compound emissions from coatings/adhesives and cleanup materials from this

emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for OC. This written report shall be submitted to the Cleveland Division of Air Quality within 30 days of the occurrence of the deviation.
6. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month individual HAP emissions for each such month;
  - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 20.0 tpy based on a rolling, 12-month summation and the actual rolling, 12-month combined HAP emissions for each such month; and
  - c. for the first 12 calendar months of operation following the issuance of this permit reports shall be submitted identifying all exceedances of the maximum allowable cumulative HAP usage and emissions rate. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

## **E. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. **Emission Limitation**  
7.31 lbs OC/hr from coatings/adhesives

### **Applicable Compliance Method**

Compliance shall be determined from the record keeping and reporting in sections C.2 and D.2 above, respectively.

- b. **Emission Limitation**  
0.06 TPY OC from cleanup material  
  
**Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.
  - c. **Emission Limitation**  
13.68 TPY OC from coatings/adhesives  
  
**Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.3 and D.3 above, respectively.
  - d. **Emission Limitation**  
OC emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 96.0 tons per year based upon a rolling, 12-month summation of emissions.  
  
**Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting in sections C.4 and D.5 above, respectively.
  - e. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 9.0 TPY for any single HAP.  
  
**Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.
  - f. **Emission Limitation**  
HAP emissions from emissions units K001, K002, K003, K004, K005, K006, K007, and K008 shall not exceed 20.0 TPY for any combination of HAPs.  
  
**Applicable Compliance Method**  
Compliance shall be determined from the record keeping and reporting sections C.6 and D.6 above, respectively.
2. Formulation data or U.S. EPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC content of the coatings/adhesives and cleanup materials. The CDAQ or Ohio EPA may require that U.S. EPA Method 24 be used to determine the OC content of the coatings/adhesives and cleanup materials. If an owner or operator determines that Method 24 cannot be used for a particular coating/adhesive or cleanup material, the permittee shall so notify the administrator of the U.S. EPA and shall use

formulation data for that coating, adhesive, or cleanup material to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24.

**F. Miscellaneous Requirements**

None.