



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-21973

Fac ID: 0285030351

DATE: 5/28/2006

Seaman Corporation
Andrew Shimko
1000 Venture Blvd
Wooster, OH 44691

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

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

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

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

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 5/28/2006
Effective Date: 5/28/2006**

FINAL PERMIT TO INSTALL 02-21973

Application Number: 02-21973
Facility ID: 0285030351
Permit Fee: **\$3000**
Name of Facility: Seaman Corporation
Person to Contact: Andrew Shimko
Address: 1000 Venture Blvd
Wooster, OH 44691

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1000 Venture Blvd
Wooster, Ohio**

Description of proposed emissions unit(s):
Chapter 31 modification to PTI 02-16554 to adjust the required control efficiency.

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. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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7. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. 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.

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12. 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.

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, 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. Permit Transfers

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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.

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4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

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8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	4.4
VOC	217.4

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

1. The operation of the control equipment outside of the restrictions established in the Special Terms and Conditions may or may not indicate a mass emission violation. If required by the Ohio EPA, compliance with the mass emission limitations shall be determined by performing concurrent mass emission tests and parameter readings, using US EPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of the restrictions specified is indicative of a possible violation of the mass emission limitations.
2. Parameter deviations due to such malfunctions, that comply with the requirements of OAC rule 3745-15-06(B), do not constitute violations of the operational restrictions for the emissions units at this facility.
3. Emissions Limitation:
 Pursuant to OAC rule 3745-31-05(C), total emissions from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined, shall not exceed 9.9 tons per year of each single hazardous air pollutant (HAP), and 24.9 tons per year of combined HAP, based upon a rolling, 12-month summation.
4. Operational Restriction:
 The maximum coating and cleanup usage for this emissions unit, shall not cause emissions to exceed 9.9 tons of each single HAP and 24.9 tons of combined HAPs per rolling 12 months, calculated using the following formulas:

Emissions from K002 and K005:

$$XX.X \text{ tons single HAP} \geq \sum_{n=1}^i \frac{(P_i)(HAP_i)[1 - (\text{capture} * \text{DRE})]}{2000 \text{ lbs/ton}}$$

where:

- P_i = usage of coating i in pounds
- HAP_i = HAP content of coating i in pounds HAP per pound coating.
- capture = the capture efficiency, assumed to be 100% for K002 and K005.
- DRE = destruction removal efficiency of the thermal incinerator for K002

and K005

Emissions from K001, K003, K004, P002, P003, P005, P006, P007, and P008:

$$YY.Y \text{ tons single HAP} \geq \sum_{n=1}^i \frac{(P_i)(HAP_i)}{2000 \text{ lbs/ton}}$$

where:

P_i = usage of coating i in pounds

HAP_i = HAP content of coating i in pounds HAP per pound coating.

Emissions from K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008:

$$9.9 \text{ tons single HAP} \geq XX.X + YY.Y$$

$$24.9 \text{ tons combined HAP} \geq \sum_{n=1}^i XX.X + YY.Y$$

5. Monitoring and/or Recordkeeping Requirements

The permittee shall collect and record the following information each month for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined:

- a. the name and identification number of each coating and cleanup material, as applied;
- b. the number of pounds of each coating and cleanup material employed;
- c. the single Hazardous Air Pollutant (HAP)¹ content for each HAP of each coating and cleanup material, in pounds of individual HAP per pound of coating, as applied;
- d. the total single HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month, i.e., for each HAP the sum of (b) times (c) for each coating and cleanup material divided by 2000;
- e. the rolling, 12-month summation of the emissions of each single HAP from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined for the previous 12-month period, i.e., the summation of (d) in tons per rolling, 12-month period (for K002 and K005 multiply by the control efficiency);
- f. the combined Hazardous Air Pollutants (HAPs)¹ content for all HAPs of each coating and cleanup material, in pounds of combined HAPs per pound of coating, as applied;

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- g. the total combined HAPs emissions from all coatings and cleanup materials employed, in tons per month, i.e., the sum of (b) times (f) for each coating and cleanup material divided by 2000;
- h. the rolling, 12-month summation of the emissions of combined HAPs from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined for the previous 12-month period, i.e., the summation of (g) in tons per rolling, 12-month period.

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

- 6. The permittee submit quarterly deviation (excursion) reports that identify:
 - a. any exceedence of the rolling, 12-month emissions limitation for each single HAP from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined, and the actual single HAP emissions during such period;
 - b. any exceedence of the rolling, 12-month emissions limitation for combined HAPs from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined, and the actual combined HAPs emissions during such period.

The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

- 7. Compliance with the allowable emission limitations in Section II.A.3 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitations:
9.9 tons of each single HAP, based upon a rolling, 12-month summation for K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.

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Applicable Compliance Method:

Compliance shall be based on the record keeping as specified in Section II.A.5.

g. Emissions Limitations:

24.9 tons of each total combined HAPs, based upon a rolling, 12-month summation for K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.

Applicable Compliance Method:

Compliance shall be based on the record keeping as specified in Section II.A.5.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
K001 - Hot melt coating of continuous web of fabric with PVC or polyurethane dry blend. Line consists of a continuous mixer at the line, extruder and hot melt head.	OAC rule 3745-31-05(A)(3)	See A.I.2.a, A.I.2.b, A.I.2.c and A.I.2.d below.
	OAC rule 3745-21-09(H)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The VOC contents of the coatings (dry blend) employed in this emissions unit shall not exceed 0.003 pound VOC per pound coating compound, as applied, excluding water and exempt solvents. This is the same as 0.0174 pound VOC per gallon dry blend.
- 2.b The hourly VOC emissions from coatings shall not exceed 3.3 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 1100 pounds per hour, as applied, times 0.003 pound VOC per pound coating. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c The VOC emissions from all coatings shall not exceed 14.5 tons per year.
- 2.d The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as applied (excluding water and exempt solvents); and
 - c. the number of pounds of each coating applied.

2. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).

3. The permittee shall collect and record the following information for the purpose of determining the annual summation of VOC emissions from coatings:
 - a. each month, the total VOC emissions from all coatings, in pounds or tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material); and
 - b. the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material divided by 2000 pounds per ton)

IV. Reporting Requirements

Emissions Unit ID: K001

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify any record that indicates the coating VOC content exceeded 0.003 lb/lb.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.003 pound VOC per pound coating compound, as applied, excluding water and exempt solvents. This is the same as 0.0174 pound VOC per gallon dry blend.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - b. Emissions Limitation:
3.3 pounds VOC emissions from coatings per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance.
 - c. Emissions Limitation:
14.5 tons VOC emissions from all coatings per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in III.3.b.of these terms and conditions.
 - d. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.2.d for the calendar year divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

Seam**PTI A****Issued: 5/28/2006**

Emissions Unit ID: K001

B. State Only Enforceable Section**I. 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>
K001 - Hot melt coating of continuous web of fabric with PVC or polyurethane dry blend. Line consists of a continuous mixer at the line, extruder and hot melt head.		

2. Additional Terms and Conditions**2.a** None**II. Operational Restrictions**

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
K002 - Line 4. Knife-over-roll coating of continuous web of uncoated or vinyl coated fabric with PVC plastisol or urethane adhesive and/or rotogravure coating with acrylic top finish. Ovens and coating head are vented to the RTO.	OAC rule 3745-31-05(A)(3)	See A.I.2.a, A.I.2.b, A.I.2.c, A.I.2.e, and A.I.2.h below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
	OAC rule 3745-21-09(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-21-09(H)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
	OAC rule 3745-31-05(C)	See A.I.2.d, A.I.2.f, A.I.2.g and A.I.2.j below.
	40 CFR 64 (Compliance Assurance Monitoring)	See A.I.2.i below.

2. Additional Terms and Conditions

- 2.a The VOC content of the fabric coatings (PVC adhesives and PVC plastisols) employed in this emissions unit shall not exceed 0.03 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the

same as 0.303 pound VOC per gallon of adhesive currently employed.

- 2.b** The VOC content of the vinyl coatings (top finish and urethane adhesive) employed in this emissions unit shall not exceed 0.9 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the same as 6.57 pounds VOC per gallon of top finish currently employed.
- 2.c** The hourly VOC emissions from coatings shall not exceed 7.6 pounds per hour. The hourly emission limitation is based on the sum of the following multiplied by a control efficiency factor of 0.03 (97 %):
 - a. maximum fabric coating usage rate of 1100 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 98% factor to account for losses from mixing.
 - b. maximum vinyl coating usage rate of 250 pounds per hour, as applied, times 0.9 pound VOC per pound coating times 98% factor to account for losses from mixing.
- 2.d** The VOC emission from all coating application shall not exceed 8.2 tons per year, as a rolling, 12-month summation.
- 2.e** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.f** The permanent total enclosure (PTE) shall be designed and operated as a permanent total enclosure as defined by US EPA Method 204. The use of this PTE, as defined in Reference Method 204, shall ensure 100% capture of all VOC emissions and thus shall be assumed to capture 100% of OC emissions.
- 2.g** The permittee shall employ a thermal oxidizer system to control the VOC emissions from the permanent total enclosure. The oxidizer system shall have a VOC destruction efficiency of at least 97 %, by weight.
- 2.h** The permittee has the option to perform an additional demonstration to show that the PTE can not be compromised, under normal plant conditions, when the emissions unit is in operation (i.e., the air flow through the PTE to the control device was always maintained under negative pressure even when all additional egress points (non-natural draft openings) which could affect the PTE were

opened) in lieu of installing, maintaining and operating monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the PTE.

If the PTE can not be compromised, under normal plant conditions, when the emissions unit is in operation, the permittee will not be required to comply with the differential pressure operational restriction, monitoring, record keeping, and reporting requirements specified below to ensure the ongoing integrity of the PTE.

If the permittee elects not to perform the additional demonstration to show that the PTE can not be compromised or the additional demonstration indicates that the PTE can be compromised, the permittee shall comply with the differential pressure operational restriction, monitoring, record keeping, and reporting requirements specified below (see Sections A.II, A.III, and A.IV below) to ensure the ongoing integrity of the PTE.

- 2.i** This emissions unit is a pollutant specific emissions unit according to 40 CFR 64 and will be required to develop a CAM plan prior to the issuance of the Title V operating permit.
- 2.j** Emissions from emissions unit K002, shall not exceed 5.6 tons per year of each single hazardous air pollutant (HAP), and 5.6 tons per year of combined HAP, based upon a rolling, 12-month summation.

II. Operational Restrictions

- 1. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance.
- 2. This emissions unit shall be totally enclosed such that all the OC emissions are captured for venting to the thermal oxidizer. Compliance with the following criteria, as specified by USEPA Method 204, shall be met by the permittee:
 - a. any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator;

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- b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all the NDO's shall be at least 3,600 m/hr (200 fpm), as a 3 hour average, or the differential pressure between the inside and outside of the enclosure shall not be less than 0.007 inch of water column, as a 3 hour average;
 - d. the direction of air flow through all NDO's shall be into the enclosure;
 - e. all access doors and windows whose areas are not included in section (b) and are not included in the calculations in section (c) shall be closed during routine operation of the process; and
 - f. all VOC emissions from the coating application must be captured and contained for discharge to the thermal oxidizer.
3. The maximum coating and cleanup usage for this emissions unit, shall not cause emissions to exceed 5.6 tons of each single HAP and 5.6 tons of combined HAPs per rolling 12 months, calculated using the following formula:

$$XX.X \text{ tons HAP} \geq \sum_{n=1}^i \frac{(P_i)(HAP_i)[1 - (\text{capture} * \text{DRE})]}{2000 \text{ lbs/ton}}$$

where:

- P_i = usage of coating i in pounds
 HAP_i = HAP content of coating i in pounds HAP per pound coating.
 capture = the capture efficiency, assumed to be 100%
 DRE = destruction removal efficiency of the thermal incinerator

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as applied (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.

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

2. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).

Emissions Unit ID: K002

3. The permittee shall collect and record the following information monthly for the purpose of determining the rolling, 12-month summation of VOC emissions from coatings:
 - a. the total VOC emissions from all coatings, in pounds or tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 98% emission factor to account for mixing losses); and
 - b. the total VOC emissions from this emissions unit for the previous rolling, 12-month period.

4. The permittee shall collect and record the following information monthly for the purpose of determining the rolling, 12-month summation of single and combined HAP emissions from coatings and cleanup materials:
 - a. the name and identification number of each clean up material employed;
 - b. the number of pounds of each coating and cleanup material employed;
 - c. the single Hazardous Air Pollutant (HAP)¹ content for each HAP of each coating and cleanup material, in pounds of individual HAP per pound of coating, as applied;
 - d. the total single HAP emissions for each HAP from all coatings and cleanup materials employed, in tons per month, i.e., for each HAP the sum of (b) times (c) for each coating and cleanup material divided by 2000;
 - e. the rolling, 12-month summation of the emissions of each single HAP from emissions unit K002 for the previous 12-month period, i.e., the summation of (d) in tons per rolling, 12-month period;
 - f. the combined Hazardous Air Pollutants (HAPs)¹ content for all HAPs of each coating and cleanup material, in pounds of combined HAPs per pound of coating, as applied;
 - g. the total combined HAPs emissions from all coatings and cleanup materials employed, in tons per month, i.e., the sum of (b) times (f) for each coating and cleanup material divided by 2000; and
 - h. the rolling, 12-month summation of the emissions of combined HAPs from emissions units K002 combined for the previous 12-month period, i.e., the summation of (g) in tons per rolling, 12-month period.

¹ A listing of the Hazardous Air Pollutants (HAPs) can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air

agency contact. Material Safety Data Sheets or Environmental Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials.

5. The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measure and record the differential pressure between the inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director.
6. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the combustion temperature. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
7. The permittee shall collect and record the following information for each day for the control equipment:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance; and
 - c. all 3-hour blocks of time during which the average static pressure differential across the permanent total enclosure was less than the 0.007 inch of water column, when the emissions unit was in operation.

IV. Reporting Requirements

1. In accordance to the procedures established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:

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- a. any record that indicates the fabric coating (PVC adhesives and PVC plastisols) VOC content exceeded 0.03 lb/lb;
 - b. any record that indicates the vinyl coating (top finish and urethane adhesive) VOC content exceeded 0.9 lb/lb;
 - c. any monthly record that indicates the rolling, 12-month summation of VOC emissions from coatings exceeded limit specified above;
 - d. any monthly record that indicates the rolling, 12-month summation of VOC emissions from cleanup material exceeded limit specified above; and
 - e. any exceedence of the rolling, 12-month emissions limitation for each single HAP from emissions units K002, and the actual single HAP emissions during such period;
 - f. any exceedence of the rolling, 12-month emissions limitation for combined HAPs from emissions units K002, and the actual combined HAPs emissions during such period.
2. The permittee shall submit quarterly deviation (excursion) reports which identify:
- a. any record showing that the pressure drop across the permanent total enclosure was less than 0.007 inch of water column, as a 3-hour average, when the emissions unit was in operation;
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance; and
 - c. a quarterly summary which includes a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The reports contained in this permit shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound (PVC adhesives and PVC plastisols), as applied excluding water and exempt solvents.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - b. Emissions Limitation:
0.9 pound VOC per pound vinyl coating compound (top finish and urethane adhesive), as applied excluding water and exempt solvents.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - c. Emissions Limitation:
7.6 pounds VOC emissions from all coatings per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction and overall control efficiency; therefore, record keeping and reporting are not necessary to verify compliance.
 - d. Emissions Limitation:
8.2 tons VOC emission from all coatings per year, as a rolling 12-month summation.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in III.3.b of these terms and conditions.
 - e. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in III.2.d of these terms and conditions.

2. Emission Limitation:
100% capture efficiency of the VOC from the coating line, and 97 % destruction efficiency of the control device.

Applicable Compliance Method:

The permittee had conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing of the control device was last tested September 21 and 22, 2005. The permanent total enclosure was last verified on June 11, 1999.
- b. The emission testing was conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds and the ninety-seven (97) percent destruction efficiency requirement for the thermal oxidizer.
- c. The following test method(s) were employed to demonstrate compliance with the destruction efficiency requirement for the thermal oxidizer: Method 25A of 40 CFR Part 60, Appendix A.
- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) was determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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>
K002 - Line 4. Knife-over-roll coating of continuous web of uncoated or vinyl coated fabric with PVC plastisol or urethane adhesive and/or rotogravure coating with acrylic top finish. Ovens and coating head are vented to the RTO.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit K002 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: Toluene

TLV (mg/m³): 188

Maximum Hourly Emission Rate (lbs/hr): 6.7

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 104

MAGLC (ug/m³): 4,480

2. 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.).
3. 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

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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.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
K003 - Line 5 and an oven. Pad roll coating of continuous web of uncoated fabric with PVC plastisol primer or PVC plastisol, and/or rotogravure coating of acrylic top finish.	OAC rule 3745-31-05(A)(3)	See A.I.2.a, A.I.2.b, A.I.2.c, A.I.2.d, and A.I.2.e below.
	OAC rule 3745-21-09(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-09(H)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The VOC contents of the coatings (adhesives and plastisol) employed in this emissions unit shall not exceed 0.03 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the same as 0.303 pound VOC per gallon of adhesive currently employed.
- 2.b The hourly VOC emissions from coatings shall not exceed 29.4 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 1000 pounds per hour, as applied, times 0.03 pound VOC per pound coating

times 98% factor to account for losses from mixing. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.

- 2.c** The VOC emission from all coatings shall not exceed 128.8 tons per year.
- 2.d** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e** The regenerative thermal oxidizer shall be used to reduce the visible emissions from the gas oven.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as applied (excluding water and exempt solvents); and
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.

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

2. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean

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- up material;
- c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
3. The permittee shall collect and record the following information for the purpose of determining the annual summation of VOC emissions from coatings:
 - a. each month, the total VOC emissions from all coatings, in pounds or tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 98% emission factor to account for mixing losses); and
 - b. the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 98% emission factor to account for mixing losses divided by 2000 pounds per ton)
 4. The permittee shall collect and record for each day a log of the downtime for the control device when the gas oven was in operation.

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. any record that indicates the coating VOC content exceeded the limit specified above;
 - b. a quarterly summary which includes the downtime for the control device when the gas oven was in operation.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.03 pound VOC per pound coating compound, as applied excluding water and

exempt solvents. This is the same as 0.303 pound VOC per gallon adhesive.

Applicable Compliance Method:

Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.

- b. Emissions Limitation:
29.4 pounds VOC emissions from all coatings per hour.

Applicable Compliance Method:

This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance.

- c. Emissions Limitation:
128.8 tons VOC emissions from all coatings per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in III.3.b. of these terms and conditions.

- d. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.2.d for the calendar year divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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>
K003 - Line 5 and an oven. Pad roll coating of continuous web of uncoated fabric with PVC plastisol primer or PVC plastisol, and/or rotogravure coating of acrylic top finish.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - Line 8 and an IR oven. Lamination of a continuous film onto a continuous web of vinyl coated fabric, using low solvent adhesive for bonding. Line consists of two roll adhesive applicator and laminating rolls.	OAC rule 3745-31-05(A)(3)	See A.I.2.a, A.I.2.b, A.I.2.c and A.I.2.d below. The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart VVV.
	OAC rule 3745-21-09(H)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
	OAC rule 3745-21-09(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05 (A)(3).
	40 CFR 60, Subpart VVV	See section A.I.2.e, A.III.4 and A.IV.3 below.

2. Additional Terms and Conditions

- 2.a** The VOC contents of the coatings (PVC adhesives and PVC plastisol) employed in this emissions unit shall not exceed 0.03 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the same as 0.303 pound VOC per gallon of adhesive currently employed.
- 2.b** The hourly VOC emissions from coatings shall not exceed 10.6 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 360 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 98% factor to account for losses from mixing. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c** The VOC emission from all coatings shall not exceed 46.4 tons per year.
- 2.d** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e** While the total amount of VOC used on coating line K004 and any onsite mix preparation equipment used to prepare coatings (P006, P007, and P008 when mixing for K004) is less than 95 Mg (104.7 tons) per 12-month period, this emissions unit is subject only to the recordkeeping and reporting requirements of A.III.4 and A.IV.3. If the amount of VOC used is 95 Mg or greater in any 12-month period, the affected emissions units shall become subject to all of the requirements of 40 CFR 60, Subpart VVV. Once an emissions unit has become subject to the requirements of Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as applied (excluding water and exempt solvents); and

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- c. the number of pounds of each coating applied, excluding water and exempt solvents..

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

2. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
3. The permittee shall collect and record the following information for the purpose of determining the annual summation of VOC emissions from coatings:
 - a. each month, the total VOC emissions from all coatings, in pounds or tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 98% emission factor to account for mixing losses); and
 - b. the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 98% emission factor to account for mixing losses divided by 2000 pounds per ton).
4. To comply with 40 CFR 60 Subpart VVV, the permittee shall record semi-annually:
 - a. an estimate of projected VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004); and
 - b. the actual 12-month VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004).

IV. Reporting Requirements

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1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify any record that indicates the coating VOC content exceeded 0.03 lb/lb.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. To comply with Subpart VVV, the permittee shall:
 - a. report the first semi-annual estimate in which projected annual VOC use exceeds 95 Mg/yr; and
 - b. report the first 12-month period in which the actual VOC use exceeds 95 Mg/yr.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.03 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the same as 0.303 pound VOC per gallon adhesive.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - b. Emissions Limitation:
10.6 pounds VOC emissions from coatings per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance
 - c. Emissions Limitation:
46.4 tons VOC emission from all coatings per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in III.3.b.of these terms and conditions.
 - d. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.2.d for the calendar year divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

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Emissions Unit ID: K004

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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 - Line 8 and an IR oven. Lamination of a continuous film onto a continuous web of vinyl coated fabric, using low solvent adhesive for bonding. Line consists of two roll adhesive applicator and laminating rolls.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

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V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - Hot melt coating of continuous web of fabric with PVC or polyurethane dry blend compounds. Line consists of a continuous mixer and extruder vented to a regenerative thermal oxidizer, and a hot melt head and rolls.	OAC rule 3745-31-05(A)(3)	See A.I.2.a, A.I.2.b, A.I.2.d, and A.I.2.g below. The requirements of this rule also include compliance with the requirements of 40 CFR 60, Subpart VVV.
	OAC rule 3745-21-09(H)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C)	See A.I.2.c, A.I.2.e and A.I.2.f below.
	40 CFR 60, Subpart VVV	See A.I.2.h, A.III.7 and A.IV.4 .

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) contents of the coatings (dry blend) employed in this emissions unit shall not exceed 0.003 pound VOC per pound coating compound, as applied excluding water and exempt solvents. This is the same as 0.0174 pound VOC per gallon dry blend.

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- 2.b** The VOC emissions from coatings shall not exceed 0.306 pounds per hour. The hourly emission limitation is based on the product of the maximum fabric coating usage rate of 3400 pounds per hour, as applied, times 0.003 pound VOC per pound coating multiplied by a control efficiency factor of 0.03 (1-97 %).
- 2.c** The VOC emissions from all coatings shall not exceed 1.3 tons per year.
- 2.d** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e** The continuous mixer and extruder shall be designed and operated to meet the requirements of a permanent total enclosure (PTE) as defined by USEPA Method 204. The use of this PTE, as defined in Reference Method 204, shall ensure 100% capture of all the VOC emissions and thus shall be assumed to capture 100% of OC emissions.
- 2.f** The permittee shall employ an oxidizer system to control the VOC emissions from the permanent total enclosure around the continuous mixer. The oxidizer system shall have an VOC destruction efficiency of at least 97 %, by weight.
- 2.g** The permittee has the option to verify the PTE to the Director's satisfaction and institute a monthly leak detection program or to perform an additional demonstration to show that the PTE can not be compromised, under normal plant conditions, when the emissions unit is in operation (i.e., the air flow through the PTE to the control device was always maintained under negative pressure even when all additional egress points (non-natural draft openings) which could affect the PTE were opened) in lieu of installing, maintaining and operating monitoring devices and a recorder which simultaneously measure and record the pressure inside and outside the PTE.
- If the PTE can not be compromised, under normal plant conditions, when the emissions unit is in operation, the permittee will not be required to comply with the differential pressure operational restriction, monitoring, record keeping, and reporting requirements specified below to ensure the ongoing integrity of the PTE.
- If the permittee elects not to perform the additional demonstration to show that the PTE can not be compromised or the additional demonstration indicates that the PTE can be compromised, the permittee shall comply with the differential pressure operational restriction, monitoring, record keeping, and reporting requirements specified below (see Sections A.II, A.III, and A.IV below) to ensure the ongoing integrity of the PTE.
- 2.h** While the total amount of VOC used on coating line K005 and any onsite mix preparation equipment used to prepare coatings for K005 is less than 95 Mg

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(104.7 tons) per 12-month period, this emissions unit is subject only to the recordkeeping and reporting requirements of A.III.4 and A.IV.3. If the amount of VOC used is 95 Mg or greater in any 12-month period, the affected emissions units shall become subject to all of the requirements of 40 CFR 60, Subpart VVV. Once an emissions unit has become subject to the requirements of Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

II. Operational Restrictions

1. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance.
2. This emissions unit shall be totally enclosed such that all the VOC emissions are captured for venting to the thermal oxidizer. Compliance with the following criteria, as specified by USEPA Method 204, shall be met by the permittee:
 - a. any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator;
 - b. the total area of all NDO's shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;
 - c. the average facial velocity (FV) of air through all the NDO's shall be at least 3,600 m/hr (200 fpm), as a 3 hour average, or the differential pressure between the inside and outside of the enclosure shall not be less than 0.007 inch of water column, as a 3 hour average;
 - d. the direction of air flow through all NDO's shall be into the enclosure;
 - e. all access doors and windows whose areas are not included in section (b) and are not included in the calculations in section (c) shall be closed during routine operation of the process; and
 - f. all VOC emissions from the coating application must be captured and contained for discharge to the thermal oxidizer.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as

Emissions Unit ID: K005

applied (excluding water and exempt solvents); and

- c. the number of pounds of each coating applied.

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

2. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
3. The permittee shall collect and record the following information for the purpose of determining the annual summation of VOC emissions from coatings:
 - a. each month, the total VOC emissions from all coatings, in pounds or tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material); and
 - b. the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material divided by 2000 pounds per ton).
4. The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measure and record the differential pressure between the inside and outside the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director.
5. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the

combustion temperature. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee and approved in writing by the Director.

6. The permittee shall collect and record the following information for each day for the control equipment:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation;
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance; and
 - c. all 3-hour blocks of time during which the average static pressure differential across the building enclosure was less than the 0.007 inch of water column, when the emissions unit was in operation.
7. To comply with 40 CFR 60 Subpart VVV, the permittee shall record semi-annually:
 - a. an estimate of projected VOC use in K005 and the associated mixers (P001); and
 - b. the actual 12-month VOC use in K005 and the associated mixers(P001).

IV. Reporting Requirements

1. In accordance to the procedures established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify any record that indicates the coating VOC content exceeded 0.003 lb/lb.
2. The permittee shall submit quarterly deviation (excursion) reports which identify:
 - a. any record showing that the pressure drop across the building enclosure was less than 0.007 inch of water column, as a 3-hour average, when the emissions unit was in operation;

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- b. all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance; and
 - c. a quarterly summary which includes a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

4. To comply with Subpart VVV, the permittee shall report:
 - a. the first semi-annual estimate in which projected annual VOC use exceeds 95 Mg/yr; and
 - b. the first 12-month period in which the actual VOC use exceeds 95 Mg/yr.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.003 pound VOC per pound coating compound, as applied excluding water and exempt solvents.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - b. Emissions Limitation:
0.306 pounds VOC emissions from coatings per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction and overall control efficiency; therefore, record keeping and reporting are not necessary to verify compliance.
 - c. Emissions Limitation:
1.3 tons VOC emission from all coatings per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in III.3.b of these terms and conditions.
 - d. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

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Emissions Unit ID: K005

Applicable Compliance Method:

Compliance shall be determined as a sum of the monthly records in A.III.2.d for the calendar year divided by 2000 pounds per ton.

2. Emission Limitation:
100% capture efficiency of the VOC from the coating line, and 97 % destruction efficiency of the control device.

Applicable Compliance Method:

The permittee had conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing of the control device was last tested September 21 and 22, 2005. The capture efficiency was last verified on September 21 and 22, 2005.
- b. The emission testing was conducted to demonstrate compliance with the overall control efficiency limitation for organic compounds and the ninety-seven (97) percent destruction efficiency requirement for the thermal oxidizer.
- c. The following test method(s) were employed to demonstrate compliance with the destruction efficiency requirement for the thermal oxidizer: Method 25 or 25A of 40 CFR Part 60, Appendix A. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) was determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10.
- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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>
<p>K005 - Hot melt coating of continuous web of fabric with PVC or polyurethane dry blend compounds. Line consists of a continuous mixer and extruder vented to a regenerative thermal oxidizer, and a hot melt head and rolls.</p>		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
P002 - Cowles, large coating mixer for the production of plastisol or adhesive for coating lines 4 and 5 (K002 and K003). Organic emissions are uncontrolled.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07 OAC rule 3745-17-07(B)(11)(e) OAC rule 3745-17-08 OAC rule 3745-17-11

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Applicable Emissions
Limitations/Control
Measures

See A.I.2.c and A.II.4 below.

See A.I.2.a, A.I.2.b,
A.I.2.e and A.I.2.f below.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05 (C).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emissions limitations specified by this rule are not applicable since the source is not located in an Appendix A area.

The emission limitations specified by this rule are not applicable since the source is not located in an Appendix A area.

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

Emissions Unit ID: P002

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of the coating mix shall not exceed 0.03 pounds per pound of coating.
- 2.b The hourly VOC emissions from coatings shall not exceed 2.88 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 4800 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c VOC emissions from coating mixing shall not exceed 2.9 tons per rolling, 12-month period.
- 2.d The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e Particulate emissions (PE) from emissions units P002, P003, P004, P006, P007 and P008 shall not exceed 0.03 grains per dry standard cubic foot of exhaust and 0.51 pounds per hour from the dust collector.
- 2.f Visible emissions from the dust collector exhaust shall not exceed 0% opacity as a six-minute average, except for one minute in any 60-minute period.

II. Operational Restrictions

- 1. The pressure drop across the dust collector shall be maintained within the manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.
- 2. The collection efficiency of the air pollution capture hoods for this emissions unit shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition.
- 3. The mixer shall be covered and controlled by the fabric filter at all times the mixer is in operation.
- 4. Coating mixed in this emissions unit shall not exceed 4818 tons per rolling, 12-month period, excluding water and exempt solvents. The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the mixing room dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director. The permittee shall record the pressure drop across the dust collector on a weekly basis, when the source is in operation.
2. The permittee shall maintain copies of the record of the weekly pressure drop readings at the facility for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
3. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
4. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;

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d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

Note: The coating information must be for the coatings as employed, including any

5. The permittee shall collect and record annually the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the pressure drop across the mixing room dust collector did not comply with the allowable range established in the operational restrictions specified above; and
 - b. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.03 grain per dscf of exhaust gas from the dust collector controlling emissions units P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:
If required, compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).
 - b. Emission Limitation:
0.51 pounds per hour of particulate emissions from the dust collector controlling emissions units P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:

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

$$(0.03 \text{ gr/dscf}) \times (2,000 \text{ cfm}) \times (60 \text{ min/hr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:

0.03 gr/dscf is the grain loading factor for the dust collectors; and
2,000 cfm is the total exhaust flow rate from the dust collector.

- c. Emission Limitation:
0% opacity as a six-minute average from the dust collector exhaust.

Applicable Compliance Methods:

Compliance shall be determined according to OAC rule 3745-17-03(B)(1),
USEPA Method 9, 40 CFR 60, Appendix A

- d. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound, as applied.

Applicable Compliance Method:

Formulation data or USEPA Method 24 shall be used to determine the organic
compound content of the coatings.

- e. Emissions Limitation:
2.88 pounds VOC emissions from coatings mixed per hour.

Applicable Compliance Method:

This emission limit reflects the potential to emit of this line with the VOC content
restriction therefore record keeping and reporting are not necessary to verify
compliance

- f. Emissions Limitation:
2.9 tons VOC emission from all coatings mixed per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in A.III.4 and
A.III.5 of these terms and conditions.

- g. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units

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K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:

Compliance shall be determined as a sum of the monthly records in A.III.3.d for the calendar year divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Cowles, large coating mixer for the production of plastisol or adhesive for coating lines 4 and 5 (K002 and K003). Organic emissions are uncontrolled.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

- 1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply

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for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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Emissions Unit ID: P003

Applicable Emissions
Limitations/Control
Measures

3745-31-05(A)(3).

See A.I.2.c, and A.II.4 below

See A.I.2.a, A.I.2.b,
A.I.2.d, A.I.2.e and A.I.2.f
below.

The requirements of this
rule also include
compliance with the
requirements of OAC rule
3745-31-05 (C).

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to
OAC rule
3745-31-05(A)(3).

The emissions limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to
OAC rule

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of the coating mix shall not exceed 0.03 pounds per pound of coating.
- 2.b The hourly VOC emissions from coatings shall not exceed 2.88 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 4800 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c VOC emissions from coating mixing shall not exceed 2.9 tons per rolling, 12-month period.
- 2.d The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e Particulate emissions (PE) from emissions units P002, P003, P004, P006, P007 and P008 shall not exceed 0.03 grains per dry standard cubic foot of exhaust and 0.51 pounds per hour from the dust collector.
- 2.f Visible emissions from the dust collector exhaust shall not exceed 0% opacity as a six-minute average, except for one minute in any 60-minute period.

II. Operational Restrictions

- 1. The pressure drop across the dust collector shall be maintained within the manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.
- 2. The collection efficiency of the air pollution capture hoods for this emissions unit shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition.
- 3. The mixer shall be covered and controlled by the fabric filter at all times the mixer is in operation.

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4. Coating mixed in this emissions unit shall not exceed 4818 tons per rolling, 12-month period, excluding water and exempt solvents.. The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the mixing room dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director. The permittee shall record the pressure drop across the dust collector on a weekly basis, when the source is in operation.
2. The permittee shall maintain copies of the record of the weekly pressure drop readings at the facility for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
3. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
4. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;

- d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

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

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5. The permittee shall collect and record annually the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the pressure drop across the mixing room dust collector did not comply with the allowable range established in the operational restrictions specified above; and
 - b. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 0.03 grain per dscf of exhaust gas from the dust collector controlling emissions units P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:

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

- b. Emission Limitation:
 0.51 pounds per hour of particulate emissions from the dust collector controlling emissions units P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:

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

$$(0.03 \text{ gr/dscf}) \times (2,000 \text{ cfm}) \times (60 \text{ min/hr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:

0.03 gr/dscf is the grain loading factor for the dust collectors; and
2,000 cfm is the total exhaust flow rate from the dust collector.

- c. Emission Limitation:
0% opacity as a six-minute average from the dust collector exhaust.

Applicable Compliance Methods:
Compliance shall be determined according to OAC rule 3745-17-03(B)(1),
USEPA Method 9, 40 CFR 60, Appendix A

- d. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound, as applied.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic
compound content of the coatings.

- e. Emissions Limitation:
2.88 pounds VOC emissions from coatings mixed per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content
restriction therefore record keeping and reporting are not necessary to verify
compliance

- f. Emissions Limitation:
2.9 tons VOC emission from all coatings mixed per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in A.III.4 and
A.III.5 of these terms and conditions.

- g. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units
K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008,
combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.3.d for
the calendar year divided by 2000 pounds per ton.

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VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

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B. State Only Enforceable Section**I. 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>
P003 - Cayuga, large mixer for the production of plastisol and adhesive for emissions units K002 and K003 (lines 4 and 5). Organic emissions are uncontrolled.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
P005 - 55 gallon drum mixer for the manufacture of top finish	OAC rule 3745-31-05(A)(3) OAC rule 3745-31-05 (C)	See A.I.2.a, A.I.2.b and A.I.2.d below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05 (C). See A.I.2.c and A.II.1 below.

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of the coating mix shall not exceed 0.9 pound per pound of coating.
- 2.b The hourly VOC emissions from coatings shall not exceed 4.5 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 250 pounds per hour, as applied, times 0.9 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c VOC emissions from material mixed shall not exceed 2.7 tons per rolling, 12-month period.
- 2.d The VOC emissions from all cleanup materials shall not exceed 6.0 tons per

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year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.

II. Operational Restrictions

1. Coating mixed in this emissions unit shall not exceed 300,000 pounds per rolling, 12-month period, excluding water and exempt solvents.. The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and Recordkeeping

1. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).
2. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;
 - d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

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

3. The permittee shall collect and record annually the total VOC emissions from all

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coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
0.9 pound VOC per pound fabric coating compound, as applied.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.
 - b. Emissions Limitation:
4.5 pounds VOC emissions from coatings mixed per hour.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance.
 - c. Emissions Limitation:
2.7 tons VOC emissions from all coatings mixed per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in A.III.2. and A.III.3 of these terms and conditions.
 - d. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008,

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combined.

Applicable Compliance Method:

Compliance shall be determined as a sum of the monthly records in A.III.1.d for the calendar year divided by 2000 pounds per ton.

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Emissions Unit ID: P005

VI. Miscellaneous

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

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B. State Only Enforceable Section**I. 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>
P005 - 55 gallon drum mixer for the manufacture of top finish		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not

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necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as

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defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	40 CFR 60, Subpart VVV
P006 - 55 gallon drum mixer for the manufacture of adhesives, vented to the 2000 cfm Torit 2 dust collector.	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-17-07	
	OAC rule 3745-17-07(B)(11)(e)	
	OAC rule 3745-17-08	
	OAC rule 3745-17-11	
	OAC rule 3745-31-05 (C)	

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Emissions Unit ID: P006

Applicable Emissions
Limitations/Control
Measures

See A.I.2.a, A.I.2.b,
A.I.2.d, A.I.2.e and A.I.2.f
below.

The requirements of this
rule also include
compliance with the
requirements of 40 CFR
60, Subpart VVV and
OAC rule 3745-31-05 (C).

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to
OAC rule
3745-31-05(A)(3).

The emissions limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to

OAC rule 3745-31-05(A)(3).

See A.I.2.c and A.II.4 below.

See A.I.2.g , A.III.5 and A.IV.2
below

2. Additional Terms and Conditions

- 2.a The volatile organic compound (VOC) content of the coating mix shall not exceed 0.03 pound per pound of coating.
- 2.b The hourly VOC emissions from coatings shall not exceed 0.72 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 1200 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c VOC emissions from material mixed shall not exceed 3.6 tons per rolling, 12-month period from this emissions unit and 3.6 tons per rolling, 12-month period from emissions units P006, P007 and P008, combined.
- 2.d The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e Particulate emissions (PE) from emissions units P002, P003, P004, P006, P007 and P008, shall not exceed 0.03 grains per dry standard cubic foot of exhaust and 0.51 pounds per hour from the dust collector.
- 2.f Visible emissions from the dust collector exhaust shall not exceed 0% as a six-minute average, except for one minute in any 60-minute period..
- 2.g While the total amount of VOC used on coating line K004 and any onsite mix preparation equipment used to prepare coatings (P006, P007, and P008 when mixing for K004) is less than 95 Mg (104.7 tons) per 12-month period, this emissions unit is subject only to the recordkeeping and reporting requirements of A.III.5 and A.IV.3. If the amount of VOC used is 95 Mg or greater in any 12-month period, the affected emissions units shall become subject to all of the requirements of 40 CFR 60, Subpart VVV. Once an emissions unit has become subject to the requirements of Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

II. Operational Restrictions

- 1. The pressure drop across the dust collector shall be maintained within the

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manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.

2. The collection efficiency of the air pollution capture hoods for this emissions unit shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition.
3. The drum mixer shall be covered and controlled by the fabric filter at all times the mixer is in operation.
4. Coating mixed in this emissions unit and in emissions unit P006, P007 and P008, combined, shall not exceed 5,957 tons per rolling, 12-month period, excluding water and exempt solvents.. The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the mixing room dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director. The permittee shall record the pressure drop across the dust collector on a weekly basis, when the source is in operation.
2. The permittee shall maintain copies of the record of the weekly pressure drop readings at the facility for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
3. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).

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

4. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;
 - d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.
5. To comply with 40 CFR 60 Subpart VVV, the permittee shall record semi-annually:
 - a. an estimate of projected VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004); and
 - b. the actual 12-month VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004).
6. The permittee shall collect and record annual the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the pressure drop across the mixing room dust collector did not comply with the allowable range established in the operational restrictions specified above; and
 - b. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.

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2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. To comply with Subpart VVV, the permittee shall report:
 - a. the first semi-annual estimate in which projected annual VOC use exceeds 95 Mg/yr; and
 - b. the first 12-month period in which the actual VOC use exceeds 95 Mg/yr.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.03 grain per dscf of exhaust gas from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).
 - b. Emission Limitation:
0.51 pounds per hour of particulate emissions from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

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

$$(0.03 \text{ gr/dscf}) \times (2,000 \text{ cfm}) \times (60 \text{ min/hr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:
0.03 gr/dscf is the grain loading factor for the dust collectors; and
2,000 cfm is the total exhaust flow rate from the dust collector.
 - c. Emission Limitation:
0% opacity from the dust collector exhaust.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule

3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).

- d. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound, as applied, exempt solvents.

Applicable Compliance Method:

Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.

- e. **Emissions Limitation:**
0.72 pounds per hour VOC emissions from coatings mixed.

Applicable Compliance Method:

This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance

- f. **Emissions Limitation:**
3.6 tons VOC emission from all coatings mixed per rolling, 12-month period from emissions unit P006, and emissions units P006, P007 and P008, combined.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in A.III.4 and A.III.6 of these terms and conditions.

- g. **Emissions Limitation:**
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:

Compliance shall be determined as a sum of the monthly records in A.III.3.d of these terms and conditions divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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>
P006 - 55 gallon drum mixer for the manufacture of adhesives, vented to the 2000 cfm Torit 2 dust collector.		

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

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1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as

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defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
P007 - Mixing Equipment Company, 55 gallon drum mixer for the manufacture or adhesives, vent to a 2000 cfm Torit 2 dust collector.	OAC rule 3745-31 -05(A)(3) OAC rule 3745-31-05 (C) 40 CFR 60, Subpart VVV
	OAC rule 3745-17-07
	OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-17-08
	OAC rule 3745-17-11

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Emissions Unit ID: P007

Applicable Emissions
Limitations/Control
Measures

See A.I.2.a, A.I.2.b,
A.I.2.d, A.I.2.e and A.I.2.f
below.

The requirements of this
rule also include
compliance with the
requirements of 40 CFR
60, Subpart VVV and
OAC rule 3745-31-05(C) .

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to
OAC rule
3745-31-05(A)(3).

The emissions limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to

OAC rule 3745-31-05(A)(3).

See A.I.2.c and A.II.4 below.

See A.I.2.g , A.III.5 and A.IV.2
below

2. Additional Terms and Conditions

- 2.a** The volatile organic compound (VOC) content of the coating mix shall not exceed 0.03 pound per pound of coating.
- 2.b** The hourly VOC emissions from coatings shall not exceed 0.72 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 1200 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c** VOC emissions from material mixed shall not exceed 3.6 tons per rolling, 12-month period from this emissions unit and 3.6 tons per rolling, 12-month period from emissions units P006, P007 and P008, combined.
- 2.d** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e** Particulate emissions (PE) from emissions units P002, P003, P004, P006, P007 and P008, shall not exceed 0.03 grains per dry standard cubic foot of exhaust and 0.51 pounds per hour from the dust collector.
- 2.f** Visible emissions from the dust collector exhaust shall not exceed 0% as a six-minute average, except for one minute in any 60-minute period..
- 2.g** While the total amount of VOC used on coating line K004 and any onsite mix preparation equipment used to prepare coatings (P006, P007, and P008 when mixing for K004) is less than 95 Mg (104.7 tons) per 12-month period, this emissions unit is subject only to the recordkeeping and reporting requirements of A.III.5 and A.IV.3. If the amount of VOC used is 95 Mg or greater in any 12-month period, the affected emissions units shall become subject to all of the requirements of 40 CFR 60, Subpart VVV. Once an emissions unit has become subject to the requirements of Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

II. Operational Restrictions

1. The pressure drop across the dust collector shall be maintained within the

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manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.

2. The collection efficiency of the air pollution capture hoods for this emissions unit shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition.
3. The drum mixer shall be covered and controlled by the fabric filter at all times the mixer is in operation.
4. Coating mixed in this emissions unit and in emissions unit P006, P007 and P008, combined, shall not exceed 5,957 tons per rolling, 12-month period, . The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the mixing room dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director. The permittee shall record the pressure drop across the dust collector on a weekly basis, when the source is in operation.
2. The permittee shall maintain copies of the record of the weekly pressure drop readings at the facility for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
3. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).

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

4. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;
 - d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.
5. To comply with 40 CFR 60 Subpart VVV, the permittee shall record semi-annually:
 - a. an estimate of projected VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004); and
 - b. the actual 12-month VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004).
6. The permittee shall collect and record annually the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the pressure drop across the mixing room dust collector did not comply with the allowable range established in the operational restrictions specified above; and
 - b. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.

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2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. To comply with Subpart VVV, the permittee shall report:
 - a. the first semi-annual estimate in which projected annual VOC use exceeds 95 Mg/yr; and
 - b. the first 12-month period in which the actual VOC use exceeds 95 Mg/yr.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.03 grain per dscf of exhaust gas from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).
 - b. Emission Limitation:
0.51 pounds per hour of particulate emissions from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

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

$$(0.03 \text{ gr/dscf}) \times (2,000 \text{ cfm}) \times (60 \text{ min/hr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:
0.03 gr/dscf is the grain loading factor for the dust collectors; and
2,000 cfm is the total exhaust flow rate from the dust collector.
 - c. Emission Limitation:
0% opacity from the dust collector exhaust.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule

3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).

- d. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound, as applied, exempt solvents.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.

- e. Emissions Limitation:
0.72 pounds per hour VOC emissions from coatings mixed.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance

- f. Emissions Limitation:
3.6 tons VOC emission from all coatings mixed per rolling, 12-month period from emissions unit P006, and emissions units P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in A.III.4 and A.III.6 of these terms and conditions.

- g. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.3.d of these terms and conditions divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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>
P007 - Mixing Equipment Company, 55 gallon drum mixer for the manufacture or adhesives, vent to a 2000 cfm Torit 2 dust collector.		

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply

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for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>
P008 - Myers model 7754-15-294, 55 gallon drum mixer for the manufacture of adhesives, vented to a 2000 cfm Torit 2 dust collector.	OAC rule 3745-3745-31-05(A)(3) OAC rule 3745-31-05 (C) 40 CFR 60, Subpart VVV
	OAC rule 3745-17-07
	OAC rule 3745-17-07(B)(11)(e)
	OAC rule 3745-17-08
	OAC rule 3745-17-11

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Emissions Unit ID: P008

Applicable Emissions
Limitations/Control
Measures

See A.I.2.a, A.I.2.b,
A.I.2.d, A.I.2.e and A.I.2.f
below.

The requirements of this
rule also include
compliance with the
requirements of 40 CFR
60, Subpart VVV and
OAC rule 3745-31-05(C).

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to
OAC rule
3745-31-05(A)(3).

The emissions limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitations
specified by this rule are
not applicable since the
source is not located in
an Appendix A area.

The emission limitation
specified by this rule is
less stringent than the
emission limitation
established pursuant to

OAC rule 3745-31-05(A)(3).

See A.I.2.c and A.II.4 below.

See A.I.2.g , A.III.5 and A.IV.2
below

2. Additional Terms and Conditions

- 2.a** The volatile organic compound (VOC) content of the coating mix shall not exceed 0.03 pound per pound of coating.
- 2.b** The hourly VOC emissions from coatings shall not exceed 0.72 pounds per hour. The hourly emission limitation is based on the maximum coating usage rate of 1200 pounds per hour, as applied, times 0.03 pound VOC per pound coating times 2% factor to account for emissions from mixing as described in AP-42. The hourly VOC emissions limitation is based on the emissions unit's potential-to-emit and thus, no hourly record-keeping is required.
- 2.c** VOC emissions from material mixed shall not exceed 3.6 tons per rolling, 12-month period from this emissions unit and 3.6 tons per rolling, 12-month period from emissions units P006, P007 and P008, combined.
- 2.d** The VOC emissions from all cleanup materials shall not exceed 6.0 tons per year for emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007, and P008, combined.
- 2.e** Particulate emissions (PE) from emissions units P002, P003, P004, P006, P007 and P008, shall not exceed 0.03 grains per dry standard cubic foot of exhaust and 0.51 pounds per hour from the dust collector.
- 2.f** Visible emissions from the dust collector exhaust shall not exceed 0% as a six-minute average, except for one minute in any 60-minute period.
- 2.g** While the total amount of VOC used on coating line K004 and any onsite mix preparation equipment used to prepare coatings (P006, P007, and P008 when mixing for K004) is less than 95 Mg (104.7 tons) per 12-month period, this emissions unit is subject only to the recordkeeping and reporting requirements of A.III.5 and A.IV.3. If the amount of VOC used is 95 Mg or greater in any 12-month period, the affected emissions units shall become subject to all of the requirements of 40 CFR 60, Subpart VVV. Once an emissions unit has become subject to the requirements of Subpart VVV, it will remain subject to those requirements regardless of changes in annual VOC use.

II. Operational Restrictions

- 1. The pressure drop across the dust collector shall be maintained within the

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manufacturer's recommended range while the emissions unit is in operation, or within the pressure drop range established during the most recent compliance inspection or stack test that determined the emissions unit was in compliance.

2. The collection efficiency of the air pollution capture hoods for this emissions unit shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. The permittee shall maintain all hoods and enclosures in good operating condition.
3. The drum mixer shall be covered and controlled by the fabric filter at all times the mixer is in operation.
4. Coating mixed in this emissions unit and in emissions unit P006, P007 and P008, combined, shall not exceed 5,957 tons per rolling, 12-month period, excluding water and exempt solvents.. The permittee has existing production records such that there is no need for first year monthly usage limitations.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the mixing room dust collector while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee and approved in writing by the Director. The permittee shall record the pressure drop across the dust collector on a weekly basis, when the source is in operation.
2. The permittee shall maintain copies of the record of the weekly pressure drop readings at the facility for a period of at least five years. Those records should be made available for Ohio EPA or their representatives to review during normal working hours.
3. The permittee shall collect and record the following cleanup material information monthly from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined for the purpose of determining the total annual VOC emissions:
 - a. the name and identification number of each clean up material employed;
 - b. the VOC content of each clean up material, in pounds VOC per pound of clean up material;
 - c. the number of pounds of each cleanup material used less the number of pounds of solvent recovered; and
 - d. the total VOC emissions from clean up material, in pounds per month (SUM of [b times c] for each clean up material).

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

4. The permittee shall collect and record the following information monthly:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, in pounds VOC per pound of coating, as mixed (excluding water and exempt solvents);
 - c. the number of pounds of each coating applied, excluding water and exempt solvents.;
 - d. the rolling, 12-month summation of total coating throughput, in pounds or tons.

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

5. To comply with 40 CFR 60 Subpart VVV, the permittee shall record semi-annually:
 - a. an estimate of projected VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004); and
 - b. the actual 12-month VOC use in K004 and the associated mixers (emissions units P006, P007 and P008, when mixing coating for K004).
6. The permittee shall collect and record annually the total VOC emissions from all coatings, in tons, (the sum of the products resulting from multiplying the VOC content of each material by the usage for that material times 2% emission factor to account for mixing losses divided by 2000 pounds per ton).

IV. Reporting Requirements

1. In accordance to the procedure established in the General Terms and Conditions, the permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all periods of time during which the pressure drop across the mixing room dust collector did not comply with the allowable range established in the operational restrictions specified above; and
 - b. any monthly record that indicates the rolling, 12-month summation of coating throughput exceeded the limit specified above.
2. The permittee shall submit annual reports which specify the total VOC emissions from this emission unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. To comply with Subpart VVV, the permittee shall report:
 - a. the first semi-annual estimate in which projected annual VOC use exceeds 95 Mg/yr; and
 - b. the first 12-month period in which the actual VOC use exceeds 95 Mg/yr.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.03 grain per dscf of exhaust gas from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule 3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).
 - b. Emission Limitation:
0.51 pounds per hour of particulate emissions from dust collector controlling P002, P003, P004, P006, P007 and P008, combined.

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

$$(0.03 \text{ gr/dscf}) \times (2,000 \text{ cfm}) \times (60 \text{ min/hr}) \times (\text{lb}/7000 \text{ gr}) \times (\text{ton}/2000 \text{ lb})$$

Where:
0.03 gr/dscf is the grain loading factor for the dust collectors; and
2,000 cfm is the total exhaust flow rate from the dust collector.
 - c. Emission Limitation:
0% opacity from the dust collector exhaust.

Applicable Compliance Methods:
If required compliance shall be determined according to OAC rule

3745-17-03(B)(10), (Method 5, 40 CFR 60, Appendix A).

- d. Emissions Limitation:
0.03 pound VOC per pound fabric coating compound, as applied, exempt solvents.

Applicable Compliance Method:
Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the coatings.

- e. Emissions Limitation:
0.72 pounds per hour VOC emissions from coatings mixed.

Applicable Compliance Method:
This emission limit reflects the potential to emit of this line with the VOC content restriction therefore record keeping and reporting are not necessary to verify compliance

- f. Emissions Limitation:
3.6 tons VOC emission from all coatings mixed per rolling, 12-month period from emissions unit P006, and emissions units P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in A.III.4 and A.III.6 of these terms and conditions.

- g. Emissions Limitation:
6.0 tons VOC emissions per year from cleanup material from emissions units K001, K002, K003, K004, K005, P002, P003, P005, P006, P007 and P008, combined.

Applicable Compliance Method:
Compliance shall be determined as a sum of the monthly records in A.III.3.d of these terms and conditions divided by 2000 pounds per ton.

VI. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 02-6354 as issued on July 11, 1996 and permit to install 02-16554 modified on July 10, 2003.

B. State Only Enforceable Section

I. 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>
P008 - Myers model 7754-15-294, 55 gallon drum mixer for the manufacture of adhesives, vented to a 2000 cfm Torit 2 dust collector.		

2. Additional Terms and Conditions

- 2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as

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Seam

PTI A

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defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.