

## Synthetic Minor Determination and/or Netting Determination

Permit To Install: 04-01459

### A. Source Description

HA International produces refractory coatings used in the foundry industry. Typically these are silica based mixes with water or hydrocarbon-based liquids added. Small amounts of formaldehyde may be added to some products as a preservative. Baghouses are used for particulate control. This permit to install modifies the existing PTIs; changing the emissions factors used to derive the HAPs, particulate, and VOC emission limitations for the resin-making processes. The existing sources will not be physically modified.

This PTI replaces the facility's previous three PTIs (04-1092, issued 10/12/2000; 04-01275, issued 10/2/2001; and 04-01276, issued 4/23/2002). These existing PTIs assumed 100% VOC losses from the mixing processes. HA International contends that the quantity of emissions from their coatings production processes are similar to those from paint manufacturing processes. The company has requested a VOC emission factor of 0.034 lb VOC emissions/lb of solvent used for coatings.

### B. Facility Emissions and Attainment Status

This facility is a minor source for carbon monoxide, nitrogen oxides, organic compounds, particulates, and sulfur dioxides. It is located in the City of Toledo in Lucas County. This location has the following status:

Pollutant	Attainment Status
CO	Unclassified
NOx	Unclassified
O3 (VOC)	Non-attainment
PE	Not Applicable
PM10	Unclassified
SO2	Attainment
Pb	Not Applicable

### C. Source Emissions

This facility currently has a plant-wide emission limitation of 46 tons per year OC, 10 tons per year of any individual HAP, 25 tons per year of all HAPs, and 175 pounds per year of formaldehyde. The facility has requested the following plant-wide emission limitations: 40 tpy OC emissions, 40 tpy particulate emissions, 8 tons per year of any individual HAP and 20 tons per year of combined HAPs.

### D. Conclusion

Federally enforceable permit limitations have been volunteered to restrict the facility to 40 tons per year OC, 40 tons per year PE, 20 tons per year of all HAPs and 8 tons per year of any individual HAP. At these levels, the facility continues to remain a minor source for PSD and Title V purposes.

Note: Fugitive emissions of particulate matter are not included in the major source determination for PSD and TV purposes for this manufacturing process.



State of Ohio Environmental Protection Agency  
Street Address

Mailing Address:  
Lazarus Gov.  
Center

**RE: DRAFT PERMIT TO INSTALL MODIFICATION  
LUCAS COUNTY**

**CERTIFIED MAIL**

**Application No: 04-01459**

**Fac ID: 0448011215**

**DATE: 4/5/2007**

HA International, LLC  
Jeff Krause  
630 Oakmont Lane  
Westmont, IL 60559

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **\$ 3375** will be due. Please do not submit any payment now.



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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Permit Issuance and Data Management Section at (614) 644-3631.

Sincerely,

*Michael W. Ahern*

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

CC: USEPA TDES Toledo Metro Area Coun of Govts IN MI

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install  
Terms and Conditions**

**Issue Date: To be entered upon final issuance  
Effective Date: To be entered upon final issuance**

**DRAFT MODIFICATION OF PERMIT TO INSTALL 04-01459**

Application Number: 04-01459  
Facility ID: 0448011215  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: HA International, LLC  
Person to Contact: Jeff Krause  
Address: 630 Oakmont Lane  
Westmont, IL 60559

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

**4243 South Ave  
Toledo, Ohio**

Description of proposed emissions unit(s):

**Modification of Emission Factor for VOC emissions.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

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Chris Korleski  
Director

HA International, LLC

Facility ID: 0448011215

PTI Application: 04-01459

Issued: To be entered upon final issuance

## Part I - GENERAL TERMS AND CONDITIONS

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

#### 1. Compliance Requirements

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

#### 2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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. Records Retention Requirements

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

#### 4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making

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**PTI Application: 04-01459**

**Facility ID: 0448011215**

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inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the

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plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

#### **10. Public Disclosure**

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

#### **11. Applicability**

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

#### **12. Best Available Technology**

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

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

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

**14. Construction Compliance Certification**

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

**15. Fees**

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

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

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	39.6 stack (38.17 increase) 171.3 fugitive (increase)
OC	40 (6 tpy decrease)

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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.

**Operations, Property, and/or Equipment - (P002) - 200 gallon paste machine No. 8, Baker Perkins mixer (1650 pounds of liquid organic materials per hour and 11,400 pounds of dry solid materials per hour, maximum) with particulate control by fabric filtration**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.3 pounds per hour and 5.7 tons per year
	fugitive particulate emissions (PE) shall not exceed 5.7 pounds per hour and 25.0 tons per year
	emissions of volatile organic compounds (VOC) shall not exceed 56 pounds per hour and 40 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e

OAC rule 3745-21-07(G)(8)	see Section II.A.2.f
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## 2. Additional Terms and Conditions

- 2.a The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
- 2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c With the exception of the annual VOC emission limitations, the hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d 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.e The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

## B. Operational Restrictions

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

## C. Monitoring and/or Recordkeeping Requirements

- 1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

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2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
  
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;



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a. Pollutant: isopropanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

**D. Reporting Requirements**

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the

following information:

- a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 11,400 pounds or the liquid organic material utilization rate exceeds 1,650 pounds per hour;
- b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
- c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
- d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
- e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

## **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

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Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.3 pounds per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (11,400 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

5.7 tons per year of PE from the stack.

Applicable Compliance Method:

Emissions Unit ID: P002

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.3 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

5.7 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (11,400 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

25.0 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 5.7 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

56 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic

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material addition (1650 pounds).

8. Emission Limitation:

40 tons per year of VOC from this emissions unit

Applicable Compliance Method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the liquid organic materials.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3.h. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4.f. of this permit.

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12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4.g. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment - (P005)** - solvent based paired Cowles mixers - 700 gallon No.10 and 350 gallon No.11 (2,325 pounds of liquid organic materials per hour and 11,200 pounds of dry solid materials per hour, maximum, only one can operate at a time) with particulate control by fabric filtration.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.3 pounds per hour and 5.7 tons per year
	fugitive particulate emissions (PE) shall not exceed 5.6 pounds per hour and 24.5 tons per year
	volatile organic compound emissions (VOC) shall not exceed 79 pounds per hour and 40 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e

OAC rule 3745-21-07(G)(8)	see Section II.A.2.f
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## **2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** With the exception of the annual VOC emission limitations, the hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

## **B. Operational Restrictions**

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

- 1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
  
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a

rolling, 12-month summation.

4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.

5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
  
6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
  - a. Pollutant: isopropanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000  
  
Maximum Hourly Emission Rate (lbs/hr): 88.3  
  
Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500  
  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400
  - b. Pollutant: hexane  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000  
  
Maximum Hourly Emission Rate (lbs/hr): 27.2  
  
Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780  
  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190
  - c. Pollutant: methanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

- e. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- f. 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

Emissions Unit ID: **P005**

- g. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 11,200 pounds or the liquid organic material utilization rate exceeds 2,325 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month

period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

#### **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.3 pounds per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (11,200 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

5.7 tons per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.3 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

5.6 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (11,200 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

Emissions Unit ID: **P005**

6. Emission Limitation:

24.5 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 5.6 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

79 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (2,325 pounds).

8. Emission Limitation:

40 tons per year of VOC from this emissions unit

Applicable Compliance Method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the liquid organic materials.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P010) - 200 gallon paste machine No.2, J.H. Day paste mixer (206 pounds of liquid organic materials per hour and 6,000 pounds of dry solid materials per hour, maximum) with fabric filtration.**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 0.7 pound per hour and 3.1 tons per year
	fugitive particulate emissions (PE) shall not exceed 3.1 pounds per hour and 13.1 tons per year
	volatile organic compound emissions (VOC) shall not exceed 7.0 pounds per hour and 30.7 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

**2. Additional Terms and Conditions**

Emissions Unit ID: **P010**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

**B. Operational Restrictions**

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;

- b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:

Emissions Unit ID: **P010**

- a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
- a. Pollutant: isopropanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000  
  
Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

**D. Reporting Requirements**

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 6,000 pounds or the liquid organic material utilization rate exceeds 206 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

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## **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

0.7 pound per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (6,000 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in

Emissions Unit ID: **P010**

accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

3.1 tons per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.7 pound of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

3.1 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (6,000 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

13.1 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 3.0 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

7.0 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (206 pounds).

8. Emission Limitation:

30.7 tons per year of VOC from this emissions unit

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 7.0 pounds of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment - (P011) - 55 gallon solvent drum mixer No. 21, Lightning mixer (256 pounds of liquid organic materials per hour and 1,600 pounds of dry solid materials per hour, maximum) with fabric filtration.**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 0.2 pound per hour and 0.9 ton per year
	fugitive particulate emissions (PE) shall not exceed 0.8 pound per hour and 3.5 tons per year
	volatile organic compound emissions (VOC) shall not exceed 8.7 pounds per hour and 38.1 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

## **2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1), and OAC rule 3745-21-07(G)(8).
- 2.c** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

## **B. Operational Restrictions**

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;

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- g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.

6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

- a. Pollutant: isopropanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

- b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

- c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 1,600 pounds or the liquid organic material utilization rate exceeds 256 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

## E. Testing Requirements

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

0.2 pound per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (1,600 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

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If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

0.9 ton per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.2 pound of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

0.8 pound per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (1,600 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

3.5 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.8 pound of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

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8.7 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (256 pounds).

8. Emission Limitation:

38.1 tons per year of VOC from this emissions unit

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 8.7 pounds of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment -#5 Paste Machine (300 pounds of liquid organic materials per hour and 9,000 pounds of dry solid materials per hour, maximum) with fabric filtration**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.0 pound per hour and 4.4 tons per year
	fugitive particulate emissions (PE) shall not exceed 4.5 pounds per hour and 19.7 tons per year
	volatile organic compound emissions (VOC) shall not exceed 10.2 pounds per hour and 40 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

**2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** With the exception of the annual VOC emission limitations, the hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

**B. Operational Restrictions**

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each product

manufactured in this emissions unit:

- a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.

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4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
  - a. Pollutant: isopropanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install

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

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

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 300 pounds or the liquid organic material utilization rate exceeds 9,000 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

## **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.0 pound per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (9,000 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

4.4 tons per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.0 pound of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

4.5 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (9,000 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

19.7 tons per year of PE fugitive

Applicable Compliance Method:

Emissions Unit ID: **P018**

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 4.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

## 7. Emission limitation:

10.2 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (300 pounds).

## 8. Emission Limitation:

40 tons per year of VOC from this emissions unit

Applicable Compliance Method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the liquid organic materials.

## 9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

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

**Operations, Property, and/or Equipment - (P019) - 1,000 gallon *let down station* No. 9 - (3,300 pounds of liquid organic materials per hour and 0 pounds of dry solid materials per hour, maximum) with no control**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	volatile organic compound emissions (VOC) shall not exceed 112 pounds per hour and 40 tons per year see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide stack particulate emissions (PE) shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.d
OAC rule 3745-21-07(G)(8)	see Section II.A.2.e

**2. Additional Terms and Conditions**

- 2.a The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
- 2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(8).
- 2.c With the exception of the annual VOC emission limitations, the hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

Emissions Unit ID: **P019**

**2.d** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).

**2.e** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

**B. Operational Restrictions**

None

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

1. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information for each month for all emissions units located at this facility:

- a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e.,  $(c)(1\%)(95\%)(1-99\%)$ , in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e.,  $(f)(0.034)$  in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.

Emissions Unit ID: **P019**

4. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
  
5. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
  - a. Pollutant: isopropanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000  
  
Maximum Hourly Emission Rate (lbs/hr): 88.3  
  
Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500  
  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400
  
  - b. Pollutant: hexane  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000  
  
Maximum Hourly Emission Rate (lbs/hr): 27.2  
  
Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780  
  
MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190
  
  - c. Pollutant: methanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above

changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 0 pounds or the liquid organic material utilization rate exceeds 3,300 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

2. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

## **E. Testing Requirements**

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

1. Emission limitation:

112 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (3,300 pounds).

2. Emission Limitation:

40 tons per year of VOC from this emissions unit

Applicable Compliance Method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.2. of this permit. Formulation data or USEPA Method 24 shall be used to determine the organic compound contents of the liquid organic materials.

3. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.2. of this permit.

4. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.2. of this permit.

5. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

6. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment - (P021) - Nos. 22, 23, 24 Toledo Shar 1,000 gallons each - (150 pounds of liquid organic materials per hour and 13,000 pounds of dry solid materials per hour, maximum) with fabric filtration**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.5 pounds per hour and 6.6 tons per year
	fugitive particulate emissions (PE) shall not exceed 6.5 pounds per hour and 28.5 tons per year
	volatile organic compound emissions (VOC) shall not exceed 5.1 pounds per hour and 22.3 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

## **2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

## **B. Operational Restrictions**

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;

Emissions Unit ID: **P021**

- g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
5. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;

- e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
6. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
7. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
- a. Pollutant: isopropanol
    - TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000
    - Maximum Hourly Emission Rate (lbs/hr): 88.3
    - Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500
    - MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400
  - b. Pollutant: hexane
    - TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:

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HA International, LLC

DTL Application Number: 04-01450

Facility ID: 0448011215

Emissions Unit ID: **P021**

Emissions Unit ID: **P021**

- a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 13,000 pounds or the liquid organic material utilization rate exceeds 150 pounds per hour;
- b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
- c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
- d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
- e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

#### **E. Testing Requirements**

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

1. Emission limitation:  
  
20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.5 pounds per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

6.6 tons per year of PE from the stack.

Applicable Compliance Method:

Emissions Unit ID: **P021**

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

## 5. Emission limitation:

6.5 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

## 6. Emission Limitation:

28.5 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 6.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

## 7. Emission limitation:

5.1 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (150 pounds).

8. Emission Limitation:

22.3 tons per year of VOC from this emissions unit

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 5.1 pounds of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment - (P022) - No. 30 MilShar 1 - (180 pounds of liquid organic materials per hour and 13,000 pounds of dry solid materials per hour, maximum) with fabric filtration**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.5 pounds per hour and 6.6 tons per year
	fugitive particulate emissions (PE) shall not exceed 6.5 pounds per hour and 28.5 tons per year
	volatile organic compound emissions (VOC) shall not exceed 6.1 pounds per hour and 26.7 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

## **2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01275 issued October 2, 2001.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

## **B. Operational Restrictions**

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

- 1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
- 2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:

- a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;
  - g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.

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4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.
6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
  - a. Pollutant: isopropanol  
  
TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 13,000 pounds or the liquid organic material utilization rate exceeds 180 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

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## **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.5 pounds per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

If required, compliance shall be demonstrated through stack testing performed in

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accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

6.6 tons per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

6.5 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

28.5 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 6.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

6.1 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (180 pounds).

8. Emission Limitation:

26.7 tons per year of VOC from this emissions unit

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 6.1 pounds of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

**Operations, Property, and/or Equipment - (P023) - No. 31 MilShar 2 - (180 pounds of liquid organic materials per hour and 13,000 pounds of dry solid materials per hour, maximum) with fabric filtration**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.5 pounds per hour and 6.6 tons per year
	fugitive particulate emissions (PE) shall not exceed 6.5 pounds per hour and 28.5 tons per year
	volatile organic compound emissions (VOC) shall not exceed 6.1 pounds per hour and 26.7 tons per year
	see Sections II.A.2.a thru 2.c
OAC rule 3745-31-05(C)	facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation
	facility-wide emissions of hazardous air pollutants (HAP) shall not exceed 8 tons individual, or 20 tons of any combination of HAPs as a rolling, 12-month summation
OAC rule 3745-17-07(A)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
OAC rule 3745-17-07(B)(1)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
OAC rule 3745-17-08(B), (B)(3)	see Section II.A.2.d
OAC rule 3745-21-07(G)(2)	Not applicable, see Section II.A.2.e
OAC rule 3745-21-07(G)(8)	see Section II.A.2.f

**2. Additional Terms and Conditions**

- 2.a** The terms and conditions of this permit supercede those identified in PTI 04-01275 issued October 2, 2001.
- 2.b** The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-07(B)(1) and OAC rule 3745-21-07(G)(8).
- 2.c** The hourly and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.
- 2.d** 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.e** The Ohio EPA White Paper on the 2006 proposed amendment of OAC rule 3745-21-07 specifies under Section D.18 that "transfer" and "mixing" are not considered "employing" as it relates to employing any photochemically reactive material or substance containing such photochemically reactive material in OAC rule 3745-21-07(G)(2).
- 2.f** Any person using liquid organic materials or substances containing any liquid organic materials shall supply the director, upon request and in the manner and form prescribed by the director, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

**B. Operational Restrictions**

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information for each product manufactured in this emissions unit:
  - a. the company identification for each product;
  - b. the maximum batch production rate of each product manufactured, in tons per batch;
  - c. the number of pounds of all dry materials mixed;
  - d. the number of pounds of all liquid organic material mixed;
  - e. the minimum number of hours per batch;
  - f. the maximum hourly utilization rate for all dry solid materials, i.e., (c)/(e), in pounds per hour (average); and
  - g. the maximum hourly liquid organic material utilization rate. i.e., (d)/(e), in pounds per hour (average).
3. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
  - a. the company identification for each product manufactured;
  - b. the total production rate of each product manufactured;
  - c. the number of tons of all dry materials mixed;
  - d. the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
  - e. the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
  - f. the number of tons of all liquid organic materials mixed;

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- g. the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
  - h. the combined facility-wide emissions of VOC for all emissions units, in tons as a rolling, 12-month summation.
4. The permittee shall collect and record the following information for each month for all emissions units located at this facility:
- a. the company identification for each HAP containing material mixed;
  - b. the number of gallons of each HAP containing material mixed;
  - c. the individual HAP content of each HAP containing material, in pounds per gallon;
  - d. the facility-wide summation of each individual HAP emission, in tons per month;
  - e. the facility-wide summation of any combination of HAP emissions, in tons per month;
  - f. the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
  - g. the facility-wide summation of any combination of HAP emissions as a rolling, 12-month summation, in tons.
5. To ensure enforceability during the first twelve calendar months of operation, following the issuance of this permit, actual emissions calculated from material usage records from the previous 11 calendar months of operation shall be used to calculate the rolling, 12-month emissions from this emissions unit and the facility.

6. The permit to install for emissions units P002, P005, P010, P011, P018, P019, P021, P022 and P023 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:

a. Pollutant: isopropanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 15,500

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 23,400

b. Pollutant: hexane

TLV ( $\mu\text{g}/\text{m}^3$ ): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,780

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 4,190

c. Pollutant: methanol

TLV ( $\mu\text{g}/\text{m}^3$ ): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 2,750

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 6,240

d. Pollutant: naphtha

TLV ( $\mu\text{g}/\text{m}^3$ ): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration ( $\mu\text{g}/\text{m}^3$ ): 4,990

MAGLC ( $\mu\text{g}/\text{m}^3$ ): 33,800

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:

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

**D. Reporting Requirements**

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.
2. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each product manufactured in this emissions unit for which hourly material utilization rate of dry solids exceeds 13,000 pounds or the liquid organic material utilization rate exceeds 180 pounds per hour;
  - b. an identification of each month during which the facility-wide PE from all stacks exceeded 40 tons as a rolling, 12-month summation, and the actual PE for each such rolling, 12-month period;
  - c. an identification of each month during which the facility-wide VOC emissions exceeded 40 tons as a rolling, 12-month summation, and the actual VOC emissions for each such rolling, 12-month period;
  - d. an identification of each month during which the combined facility-wide emissions of any individual HAP exceeded 8 tons per rolling 12-month period, and the actual 12-month summation of any such HAP emissions for each such month; and
  - e. an identification of each month during which the combined facility-wide emissions of any combination of HAPs exceeded 20 tons per rolling 12-month period, and the 12-month summation of any such HAP emissions for each such month.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter. These reports shall be submitted to the Toledo Division of Environmental Services, 348 South Erie Street, Toledo, Ohio 43604.

3. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that period.

## **E. Testing Requirements**

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

1. Emission limitation:

20 percent opacity from any stack as a 6-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

2. Emission limitation:

20 percent opacity from fugitive sources as a 3-minute average.

Applicable compliance method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with OAC rule 3745-17-03(B)(3) using the methods and procedures of Method 9 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior written approval from the Ohio EPA.

3. Emission limitation:

1.5 pounds per hour of PE from the stack

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by the capture efficiency (0.95), and one minus the control efficiency (1-0.99) and divide the result by 2000 pounds per ton.

Emissions Unit ID: **P023**

If required, compliance shall be demonstrated through stack testing performed in accordance with OAC rule 3745-17-03(B)(10) using the methods and procedures of Method 5 of 40 CFR Part 60 Appendix A.

4. Emission Limitation:

6.6 tons per year of PE from the stack.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 1.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

5. Emission limitation:

6.5 pounds per hour of PE fugitive

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 6.4-1, dated 1/95, as follows: multiply the emission factor of 20 pounds of PE emissions per ton by the maximum hourly rate of dry material addition (13,000 pounds per hour) by one minus the capture efficiency (1 - 0.95) and divide the result by 2000 pounds per ton.

6. Emission Limitation:

28.5 tons per year of PE fugitive

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 6.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

7. Emission limitation:

6.1 pounds per hour of VOC from this emissions unit

Applicable compliance method:

Compliance may be determined through calculations based on emission factors specified in STAAPA/ALAPCO/USEPA reference document Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities, page 8.5-4, dated February 2005, as follows: multiply the emission factor in pounds of VOC emissions per pound of solvent (0.034) by the maximum hourly rate of liquid organic material addition (180 pounds).

8. Emission Limitation:

26.7 tons per year of VOC from this emissions unit

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 6.1 pounds of VOC per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

9. Emission limitation:

39.6 tons per year PE facility-wide from all stacks

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

10. Emission limitation:

40 tons per year VOC facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.3. of this permit.

11. Emission limitation:

8 tons per year individual HAP facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

12. Emission limitation:

20 tons per year combined HAPs facility-wide

Applicable compliance method:

Compliance shall be demonstrated through monitoring and record keeping requirements of Section II.C.4. of this permit.

**F. Miscellaneous Requirements**

None

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215  
 FACILITY NAME HA International, LLC  
 FACILITY DESCRIPTION Modification of Emission Factor for VOC emissions. CITY/TWP Toledo  
 SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P002  
 EMISSIONS UNIT DESCRIPTION No. 8 paste machine  
 DATE INSTALLED 7/1997

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	7.0 lb/hr	5	7.0 lb/hr	16.2
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	22 lb/hr	5	56 lb/hr	40
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes  
 OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC)

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION Nos. 10/11 Cowles mixers

DATE INSTALLED 1/1980

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	3.2 lb/hr	5	6.9	30.2
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	55 lb/hr	5	79	40
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (Attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES        NO

IDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC)

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P010

EMISSIONS UNIT DESCRIPTION No. 2 paste machine

DATE INSTALLED 1/1987

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	3.1 lb/hr	5	3.1 lb/hr	16.2
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	2.3 lb/hr	10.1	7.0 lb/hr	30.7
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no

NESHAP? no

PSD? no

OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yesOPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES        NOIDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC)

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P011

EMISSIONS UNIT DESCRIPTION No. 21 drum mixer

DATE INSTALLED 1/1984

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	0.8 lb/hr	1	1.0 lb/hr	4.4
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	7.2 lb/hr	5	8.7	38.1
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no

NESHAP? no

PSD? no

OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yesOPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES        NOIDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

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Emissions Unit ID: **P023**

FACILITY DESCRIPTION Modification of Emission Factor for VOC emissions. CITY/TWP Toledo

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P018

EMISSIONS UNIT DESCRIPTION No. 5 paste mixer

DATE INSTALLED 1/1986

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	4.4 lb/hr	5	5.5 lb/hr	24.1
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	3 lb/hr	5	10.2 lb/hr	40
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (Attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no

NESHAP? no

PSD? no

OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NO

IDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC)

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P019

EMISSIONS UNIT DESCRIPTION No. 9 let down station

DATE INSTALLED 1/1980

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	n/a	n/a		
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	25 lb/hr	5	112	40
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? **no**NESHAP? **no**PSD? **no**OFFSET POLICY? **no**

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yesOPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES      NOIDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC)

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P021

EMISSIONS UNIT DESCRIPTION Nos. 22, 23, 24 Toledo Shar

DATE INSTALLED 1/1990

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	3 lb/hr	5	8.0 lb/hr	35.1
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	1 lb/hr	4.4	5.1	22.3
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no

NESHAP? no

PSD? no

OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yesOPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES        NOIDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

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Emissions Unit ID: **P023**

FACILITY DESCRIPTION Modification of Emission Factor for VOC emissions. CITY/TWP Toledo

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P022  
EMISSIONS UNIT DESCRIPTION No. 30 MilShar 1  
DATE INSTALLED 10/2001

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	1.95 lb/hr	5	8.0 lb/hr	35.1
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	0.6 lb/hr	2.6	6.1 lb/hr	26.7
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES NO

IDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha

**NEW SOURCE REVIEW FORM B**

PTI Number: 04-01459 Facility ID: 0448011215

FACILITY NAME HA International, LLC

FACILITY DESCRIPTION Modification of Emission Factor for CITY/TWP Toledo

Emissions Unit ID: **P023**

SIC CODE 2899 SCC CODE 3-04-003-99 EMISSIONS UNIT ID P023

EMISSIONS UNIT DESCRIPTION No. 31 MilShar 2

DATE INSTALLED 10/2001

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	N/A	1.95 lb/hr	5	8.0 lb/hr	35.1
PM <sub>10</sub>	Unclassified	n/a	n/a		
Sulfur Dioxide	Attainment	n/a	n/a		
Organic Compounds	Non-attainment	0.6 lb/hr	2.6	6.1 lb/hr	26.7
Nitrogen Oxides	Unclassified/Attainment	n/a	n/a		
Carbon Monoxide	Unclassified/Attainment	n/a	n/a		
Lead	N/A (attainment)	n/a	n/a		
Other: Air Toxics	N/A				

APPLICABLE FEDERAL RULES:

NSPS? no NESHAP? no PSD? no OFFSET POLICY? no

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

20 lb PM emitted per ton dry material added, as an uncontrolled emission rate (AP-42, Paint and Varnish, Table 6.4.1, dated 1/95) using 95% capture efficiency and 99% control efficiency. Visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average and visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average. VOC emission factor of 0.034 lb VOC emissions/lb of solvent used.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ na

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? x YES        NO

IDENTIFY THE AIR CONTAMINANTS: formaldehyde, hexane, isopropanol, methanol, naphtha