

Facility ID: 0448011215 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit P002](#)
- [Go to Part II for Emissions Unit P005](#)
- [Go to Part II for Emissions Unit P010](#)
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THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - 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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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) (PTI 04-01459, modified 5/15/07)	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

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23,

2002.

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).

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.

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

The 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).

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 Record Keeping 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 (g/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500

MAGLC (g/m3): 23,400

b. Pollutant: hexane

TLV (g/m3): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780

MAGLC (g/m3): 4,190

c. Pollutant: methanol

TLV (g/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750

MAGLC (g/m3): 6,240

d. Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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 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

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

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.

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.

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.

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.

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.

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.

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 material addition (1650 pounds).
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.

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

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.

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.

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

- 1. None

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Facility ID: 0448011215 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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<p>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.</p>	<p>OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)</p>	<p>particulate emissions (PE) from the stack serving this emissions unit shall not exceed 1.3 pounds per hour and 5.7 tons per year</p>
		<p>fugitive particulate emissions (PE) shall not exceed 5.6 pounds per hour and 24.5 tons per year</p>
		<p>volatile organic compound emissions (VOC) shall not exceed 79 pounds per hour and 40 tons per year</p>
		<p>see Sections II.A.2.a thru 2.c</p>
	<p>OAC rule 3745-31-05(C) (PTI 04-01459, modified 5/15/07)</p>	<p>facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation</p>
		<p>facility-wide VOC shall not exceed 40 tons as a rolling, 12-month summation</p>
		<p>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</p>
	<p>OAC rule 3745-17-07(A)(1)</p>	<p>visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average</p>
	<p>OAC rule 3745-17-07(B)(1)</p>	<p>visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average</p>
	<p>OAC rule 3745-17-08(B), (B)(3)</p>	<p>see Section II.A.2.d</p>
	<p>OAC rule 3745-21-07(G)(2)</p>	<p>Not applicable, see Section II.A.2.e</p>
	<p>OAC rule 3745-21-07(G)(8)</p>	<p>see Section II.A.2.f</p>

2. Additional Terms and Conditions

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002. 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). 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. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The 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). 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 Record Keeping 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 (g/m3): 983,000
 - Maximum Hourly Emission Rate (lbs/hr): 88.3
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500
 - MAGLC (g/m3): 23,400
 - b. Pollutant: hexane
 - TLV (g/m3): 176,000
 - Maximum Hourly Emission Rate (lbs/hr): 27.2
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780
 - MAGLC (g/m3): 4,190
 - c. Pollutant: methanol
 - TLV (g/m3): 262,000
 - Maximum Hourly Emission Rate (lbs/hr): 15.7
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750
 - MAGLC (g/m3): 6,240
 - d. Pollutant: naphtha
 - TLV (g/m3): 1,420,000
 - Maximum Hourly Emission Rate (lbs/hr): 28.5
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990
 - MAGLC (g/m3): 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 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

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

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P010 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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.	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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
	OAC rule 3745-31-05(C) (PTI 04-01459, modified 5/15/07)	see Sections II.A.2.a thru 2.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
	OAC rule 3745-17-07(A)(1)	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(B)(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 3745-17-08(B), (B)(3)	visible emissions of fugitive dust from this emissions unit shall not exceed 20 percent opacity as a 3-minute average
	OAC rule 3745-21-07(G)(2)	see Section II.A.2.d
	OAC rule 3745-21-07(G)(8)	Not applicable, see Section II.A.2.e see Section II.A.2.f

2. Additional Terms and Conditions

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
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).
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.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The 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).

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 Record Keeping 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 (g/m3): 983,000
Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500

MAGLC (g/m3): 23,400

b. Pollutant: hexane

TLV (g/m3): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780

MAGLC (g/m3): 4,190

c. Pollutant: methanol

TLV (g/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750

MAGLC (g/m3): 6,240

d. Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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.

E. Testing Requirements

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

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.

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.

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

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.

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.

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.

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).

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.
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.

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.

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.

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

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P011 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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.	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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 facility-wide PE from all stacks shall not exceed 39.6 tons as a rolling, 12-month summation
	OAC rule 3745-31-05(C) (PTI 04-01459, modified 5/15/07)	

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

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
 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).
 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.
 The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
 The 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).
 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 Record Keeping 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 (g/m3): 983,000
 Maximum Hourly Emission Rate (lbs/hr): 88.3
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500
 MAGLC (g/m3): 23,400
 - b. Pollutant: hexane
 TLV (g/m3): 176,000
 Maximum Hourly Emission Rate (lbs/hr): 27.2
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780
 MAGLC (g/m3): 4,190
 - c. Pollutant: methanol
 TLV (g/m3): 262,000
 Maximum Hourly Emission Rate (lbs/hr): 15.7
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750
 MAGLC (g/m3): 6,240
 - d. Pollutant: naphtha
 TLV (g/m3): 1,420,000
 Maximum Hourly Emission Rate (lbs/hr): 28.5
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990
 MAGLC (g/m3): 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

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

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.
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.
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.

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.

Emission limitation:

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).

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.

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.

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.

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.

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**

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P018 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P018 - #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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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 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

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
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).
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.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The 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).
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 Record Keeping 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 (g/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500

MAGLC (g/m3): 23,400
 - b. Pollutant: hexane

TLV (g/m3): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780

MAGLC (g/m3): 4,190
 - c. Pollutant: methanol

TLV (g/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750

MAGLC (g/m3): 6,240

d. Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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 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

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

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.

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.

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.

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.

Emission Limitation:

19.7 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 4.5 pounds of PE per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

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).

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.

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.

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.
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.

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

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P019 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	volatile organic compound emissions (VOC) shall not exceed 112 pounds per hour and 40 tons per year
	OAC rule 3745-31-05(C) (PTI 04-01459, modified 5/15/07)	see Sections II.A.2.a thru 2.c facility-wide stack particulate emissions (PE) 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 3745-21-07(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

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01276 issued April 23, 2002.
The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(8).
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.
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).

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. None

C. Monitoring and/or Record Keeping 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.
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 (g/m3): 983,000
 Maximum Hourly Emission Rate (lbs/hr): 88.3

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500

MAGLC (g/m3): 23,400

b. Pollutant: hexane

TLV (g/m3): 176,000

Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780

MAGLC (g/m3): 4,190

c. Pollutant: methanol

TLV (g/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750

MAGLC (g/m3): 6,240

d. Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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

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

1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P021 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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) (PTI 04-01459, modified 5/15/07)	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
	OAC rule 3745-17-07(A)(1)	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(B)(1)	visible emissions of particulate from any stack serving this emissions unit shall not exceed 20 percent opacity as a 6-minute average
		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**

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01092 issued October 12, 2000.
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).
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.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The 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).
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).

B. **Operational Restrictions**

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

C. **Monitoring and/or Record Keeping 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 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 (g/m3): 983,000
Maximum Hourly Emission Rate (lbs/hr): 88.3
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500
MAGLC (g/m3): 23,400
 - b. Pollutant: hexane
TLV (g/m3): 176,000
Maximum Hourly Emission Rate (lbs/hr): 27.2

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780

MAGLC (g/m3): 4,190

c. Pollutant: methanol

TLV (g/m3): 262,000

Maximum Hourly Emission Rate (lbs/hr): 15.7

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750

MAGLC (g/m3): 6,240

d. Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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 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

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

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.

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.

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.

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.

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.

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).

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.

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.

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.

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.

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

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P022 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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) (PTI 04-01459, modified 5/15/07)	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

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01275 issued October 2, 2001. 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). 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. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The 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). 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 Record Keeping 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 (g/m3): 983,000
 - Maximum Hourly Emission Rate (lbs/hr): 88.3
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500
 - MAGLC (g/m3): 23,400
 - b. Pollutant: hexane
 - TLV (g/m3): 176,000
 - Maximum Hourly Emission Rate (lbs/hr): 27.2
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780
 - MAGLC (g/m3): 4,190
 - c. Pollutant: methanol
 - TLV (g/m3): 262,000
 - Maximum Hourly Emission Rate (lbs/hr): 15.7
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750
 - MAGLC (g/m3): 6,240
 - d. Pollutant: naphtha
 - TLV (g/m3): 1,420,000
 - Maximum Hourly Emission Rate (lbs/hr): 28.5
 - Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990
 - MAGLC (g/m3): 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

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

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.

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.

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.

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.

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.

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.

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).

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.

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.

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.

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.

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

- 1. None

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 0448011215 Emissions Unit ID: P023 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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	OAC rule 3745-31-05(A)(3) (PTI 04-01459, modified 5/15/07)	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) (PTI 04-01459, modified 5/15/07)	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) OAC rule 3745-21-07(G)(8)	Not applicable, see Section II.A.2.e see Section II.A.2.f

2. Additional Terms and Conditions

- (a) The terms and conditions of this permit supercede those identified in PTI 04-01275 issued October 2, 2001. 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). 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. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The 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). 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 Record Keeping 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:
- the company identification for each product manufactured;
 - the total production rate of each product manufactured;
 - the number of tons of all dry materials mixed;
 - the PE emission rate from the stack for all dry solid materials, i.e., (c)(1%)(95%)(1-99%), in tons per month;
 - the combined facility-wide stack emissions of PE for all emissions units, in tons as a rolling, 12-month summation;
 - the number of tons of all liquid organic materials mixed;
 - the VOC emission rate from all liquid organic materials mixed, i.e., (f)(0.034) in tons per month;
 - 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:
- the company identification for each HAP containing material mixed;
 - the number of gallons of each HAP containing material mixed;
 - the individual HAP content of each HAP containing material, in pounds per gallon;
 - the facility-wide summation of each individual HAP emission, in tons per month;
 - the facility-wide summation of any combination of HAP emissions, in tons per month;
 - the facility-wide individual HAP emissions as a rolling, 12-month summation, in tons; and
 - 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:
- Pollutant: isopropanol
 TLV (g/m3): 983,000
 Maximum Hourly Emission Rate (lbs/hr): 88.3
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 15,500
 MAGLC (g/m3): 23,400
 - Pollutant: hexane
 TLV (g/m3): 176,000
 Maximum Hourly Emission Rate (lbs/hr): 27.2
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,780
 MAGLC (g/m3): 4,190
 - Pollutant: methanol
 TLV (g/m3): 262,000
 Maximum Hourly Emission Rate (lbs/hr): 15.7
 Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 2,750
 MAGLC (g/m3): 6,240
 - Pollutant: naphtha

TLV (g/m3): 1,420,000

Maximum Hourly Emission Rate (lbs/hr): 28.5

Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 4,990

MAGLC (g/m3): 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

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

1. None