



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-22571

Fac ID: 0204010285

DATE: 2/26/2008

Plasticolors, Inc
Edward Trenn
PO Box 816
Ashtabula, OH 44005-0816

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

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 2/26/2008
Effective Date: 2/26/2008**

FINAL PERMIT TO INSTALL 02-22571

Application Number: 02-22571
Facility ID: 0204010285
Permit Fee: **\$4250**
Name of Facility: Plasticolors, Inc
Person to Contact: Edward Trenn
Address: PO Box 816
Ashtabula, OH 44005-0816

Location of proposed air contaminant source(s) [emissions unit(s)]:
**2600 Michigan Ave
Ashtabula, Ohio**

Description of proposed emissions unit(s):
2 mixers, 3 mills, and 1 packaging line.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE/PM ₁₀	2.34
OC	61.54

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

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

Operations, Property, and/or Equipment - (P032) - Pigment dispersion mixer no. 20 with a dust control device (DC007) to control particulate emissions

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	The particulate emissions (PE) shall not exceed 0.78 ton/year. See Section A.2.a.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
OAC rule 3745-17-11(B)	3.57 pounds per hour of PE based upon Figure II.
OAC rule 3745-31-05(A)(3)(b)	See Section A.2.b.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to no chemical reaction taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.
OAC rule 3745-31-05(C)	See Section A.2.c.

2. Additional Terms and Conditions

- 2.a Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): a dust control device (DC007) with a minimum control efficiency of 99%, by weight for PE.
- 2.b The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential emissions for OC is less than ten tons per year.

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Maximum, uncontrolled OC emissions may be estimated by the following methods:

- i. Maximum emissions of 1.13 lbs OC/hr from materials loading were estimated with equation 8.4-1, p. 8.4-4, section 4.1, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- ii. Maximum emissions of 0.38 lb OC/hr from surface evaporation during mixing of were estimated with equation 8.4-22, p. 8.4-22, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- iii. Maximum annual emissions may be estimated by the following equation:
$$\text{OC(YR)} = [\text{OC_Load(HR)} + \text{OC_Mix(HR)}] \times 8,760 \text{ hrs/yr} \times 2,000 \text{ lbs OC/ton OC}$$
, which can be 6.61 tons OC/yr.

2.c Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:

- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
- ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.

- iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
- iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with Sections A.2.c.i through A.2.c.iii. by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in Sections C.3. and C.4. and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emissions limitations in Sections A.2.c.i through A.2.c.iii. is assumed as long as the permittee does not manufacture an intermediate product or a product that results in more emissions than the "worst case", presented in the air permit to install application number 02-22571 and its supporting documentation, which includes the number of gallons processed, as listed in Section B. of this permit.

B. Operational Restrictions

1. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.c.i. and A.2.c.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672

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1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

- The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.c.ii. and A.2.c.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	50,348
1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128
1-10	503,475
1-11	553,823
1-12	604,170

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

- The maximum annual usage for the emissions units specified in Section F.2.,

Emissions Unit ID: P032

corresponding to Sections A.2.c.iii. and A.2.c.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.
3. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. The name and/or identification number of each material;
 - b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first

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12-months of operation or after permit issuance, the cumulative HAP emissions, in tons;

4. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
 - c. the usage listed in term B.2 from production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.
 - e. the combined usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.3 for each calendar month.
5. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for

Emissions Unit ID: **P032**

each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$
- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Emissions Unit ID: P032

Toxic Contaminant: xylene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6MAGLC (ug/m³): 10,340

The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

6. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification"

Emissions Unit ID: P032

under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

7. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the *materials applied*.
8. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Sections F.2 and F.3. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;
 - b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2 exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs listed in B.1. These reports shall be submitted in accordance with the

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reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.

4. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation: Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method: Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if required.

- b. Emission Limitation: The PE rate shall not exceed 3.57 lbs/hr.

Applicable Compliance Method: Compliance may be based upon the following equation:

Determination of the maximum, controlled, hourly PE rate:

$$PE(HR) = PWR \times SC \times EF \times (1 - CE).$$

where:

$$PE(HR) = \text{maximum, controlled hourly PE rate, which is } 0.178 \text{ lb PE/hr.}$$

PWR = maximum process materials weight rate, in lbs/hr, which is 2,550 lbs materials/hr as specified in the application for the PTI 02-22571.

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SC = maximum solids content, which is 0.70 lb solid/lb material as specified in the application for PTI 02-22571.

EF = emissions factor, which is 20 lbs uncontrolled PE/2,000 lbs solids for dry goods handling from Table 6.4-1 in AP-42 Chap. 6.4 (5/83), for paint & varnish manufacturing.

CE = efficiency of control device, which is 0.99 (99%), as specified in the application for PTI 02-22571.

The hourly PE rate limitation of 3.57 lbs/hr is greater than or equal to the potential to emit for this emissions unit, taking into account the voluntary restriction to use any applicable air pollution control equipment. Therefore, no record keeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation.

- c. Emission Limitation: The PE rate shall not exceed 0.78 ton/year.

Applicable Compliance Method: Compliance may be based upon the following equation:

Determination of the maximum, controlled, annual PE rate:

$$PE(YR) = PE(HR) \times Hrs/Yr \times 2,000 \text{ lbs PE/ton PE.}$$

where:

$$PE(YR) = \text{maximum, controlled, annual PE rate, which is 0.78 ton/yr.}$$

$$Hrs/Yr = \text{maximum annual, operating hours, 8,760 hrs/yr.}$$

- d. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:

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- i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
 - ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, OC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.
2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

F. Miscellaneous Requirements

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:
 - a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vicking;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;

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P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
 P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
 P030 - Mixer 10, Ashland Mixer No. 10.

- b. CAB Area Emissions Unit(s):
 P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
 P006 - Mix Mixer 9; Hockmeyer HVR-50;
 P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
 P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
 P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
 P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;
 P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
 P020 - Mix Tank 25, "Tank/Mixer 25";
 P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
 P024 - Mixer 19, "Hockmeyer 125 HP";
 P032 - Pigment Dispersion Mixer 20; and
 P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".
 - d. Solvent Area Emissions Units:
 P034 - Pigment Dispersion Sand Mill 12, "Supermill";
 P035 - Pigment Dispersion Sand Mill 18 (Netzsch);
 P036 - Pigment Dispersion Sand Mill 19 (Netzsch); and
 P037 - Pigment Dispersion Packaging Line.
 - e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
 - f. Packaging Area: Packaging of non-VOC and low VOC products, a de minimis operation.
3. The following PTIs are modified and superceded by the emissions limits, operational restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.c., B.1. through B.3., C.3., C.4., D.2. D.3., E.1.d., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:
- a. PTI 02-16412 for P008 and P020;
 - b. PTI 02-04169 for P009, P010 and P011;
 - c. PTI 02-04312 for P012;
 - d. PTI 02-07715 for P013;

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- e. PTI 02-08592 for P015;
 - f. PTI 02-08639 for P016, P019;
 - g. PTI 02-10733 for P023;
 - h. PTI 02-11723 for P024; and
 - i. PTI 02-22040 for P030 and P031.
4. Pulse jet baghouse (DC007) also controls the particulate emissions from the following emissions units: P008, P010, P013, P015, P023, P024, P028 and P030.

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

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

Operations, Property, and/or Equipment - (P033) - Pigment dispersion mixer no. 22 with a fabric filter (DC007) to control particulate emissions

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	The particulate emissions (PE) shall not exceed 1.56 ton/year. See Section A.2.a.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
OAC rule 3745-17-11(B)	5.81 pounds per hour of PE based upon Figure II.
OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 66.0 lbs/day and 12.04 tons/year.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to no chemical reaction taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.
OAC rule 3745-31-05(C)	See Section A.2.b.

2. Additional Terms and Conditions

- 2.a Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): a dust control device (DC007) with a minimum control efficiency of 99%, by weight for PE.
- 2.b Permit to Install 02-22571 for this air contaminant source takes into account the

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following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:

- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
- ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.
- iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
- iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with Sections A.2.b.i through A.2.b.iii. by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in Sections C.3. and C.4. and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emissions limitations in Sections A.2.b.i through A.2.b.iii. is assumed as long as the permittee does not manufacture an intermediate product or a product that results in more emissions than the "worst case", presented in the air permit to install application number 02-22571 and its supporting documentation, which includes the number of gallons processed, as listed in Section B. of this permit.

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B. Operational Restrictions

1. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.b.i. and A.2.b.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672
1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

2. The maximum annual usage for the emissions units specified in Section F.2., corresponding Section A.2.b.ii. and A.2.b.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
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1	50,348
1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128
1-10	503,475
1-11	553,823
1-12	604,170

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

3. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.b.iii. and A.2.b.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

After the first 12 calendar months of operation or the first 12 calendar months following

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the issuance of this permit, compliance with the annual usage limitation shall be based upon a rolling, 12-month summation of the usage figures.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.
3. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. The name and/or identification number of each material;

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- b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative HAP emissions, in tons;
4. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
- a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
 - c. the usage from listed in term B.2 production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of

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- operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.
- e. the usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.3 for each calendar month.
5. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";
or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold

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Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

6. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the

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predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

7. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in

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- accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
8. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous six-month periods.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Sections F.2. and F.3. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;
 - b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs

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or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
4. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation: Visible particulate emissions from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

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Applicable Compliance Method: Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1), if required.

- b. Emission Limitation: The PE rate shall not exceed 5.81 lbs/hr.

Applicable Compliance Method: Compliance may be based upon the following equation:

Determination of the maximum, controlled, hourly PE rate:

$$PE(HR) = PWR \times SC \times EF \times (1 - CE).$$

where:

PE(HR) = maximum, controlled hourly PE rate, which is 0.357 lb PE/hr.

PWR = maximum process materials weight rate, in lbs/hr, which is 5,100 lbs materials/hr as specified in the application for the PTI 02-22571.

SC = maximum solids content, which is 0.70 lb solid/lb material as specified in the application for PTI 02-22571.

EF = emissions factor, which is 20 lbs uncontrolled PE/2,000 lbs solids for dry goods handling from Table 6.4-1 in AP-42 Chap. 6.4 (5/83), for paint & varnish manufacturing.

CE = efficiency of control device, which is 0.99 (99%), as specified in the application for PTI 02-22571.

The hourly PE rate limitation of 5.81 lbs/hr is greater than or equal to the potential to emit for this emissions unit, taking into account the voluntary restriction to use any applicable air pollution control equipment. Therefore, no record keeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation.

- c. Emission Limitation: The PE rate shall not exceed 1.56 tons/year.

Applicable Compliance Method: Compliance may be based upon the following equation:

Determination of the maximum, controlled, annual PE rate:

$$PE(YR) = PE(HR) \times Hrs/Yr \times 2,000 \text{ lbs PE/ton PE.}$$

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where:

PE(YR) = maximum, controlled, annual PE rate, which is 1.56 ton/yr.

Hrs/Yr = maximum annual, operating hours, 8,760 hrs/yr.

- d. Emission Limitation: The OC rate shall not exceed 66.0 lbs/day.

Applicable Compliance Method: Compliance may be based upon the following equations:

- i. Determination of the potential, uncontrolled daily OC emissions from materials loading:

$$E_{OC_LOAD} = 12.46 \times S \times P \times M \times Q/T \times Hrs.$$

where:

E_{OC_LOAD} = OC emissions, lbs OC/hr, from equation 8.4-1, p. 8.4-4, section 4.1, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05), which is 2.25 lbs OC/hr.

12.46 = equilibrium constant, °R/(psia x lb/lb-mole x 1,000 gal.)

S = saturation factor, dimensionless, see AP-42 Table 5.2-1, 1.45 for splash loading.

P = vapor pressure of material, psia, 0.7159 psia @ 68°F.

M = weighted average vapor molecular weight, lb/lb-mole, 76.62 lb/lb-mole @ 68°F (528°R).

Q = maximum volume of material loaded/hour, 1,200 gal/1,000 gal = 1.2 gal/gal.

T = temperature of loaded material, °R, 68°F + 460 = 528°R, maximum room temperature.

Hrs = Maximum hours of the loading operation, 24 hours/day.

- ii. Determination of the gas phase mass transfer coefficient to estimate emissions from surface evaporation during mixing:

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$$K = 0.00438 \times U^{0.78} \times (18/M)^{1/3}$$

where:

K = gas phase mass transfer coefficient for OC species, ft/sec, from equation 8.4-21, p. 8.4-20, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05), which is 0.00045 ft/sec.

U = wind speed, miles/hr, 0.1 miles/hr.

M = average weighted vapor molecular weight, lb/lb-mole, 77.22 lb/lb-mole @ 90°F (550°R).

- iii. Determination of the potential, uncontrolled daily OC emissions from surface evaporation during mixing:

$$E_{OC_MIX} = M \times K \times A \times P \times 3600 / (R \times T) \times \text{Hrs.}$$

where:

E_{OC_MIX} = OC emissions, lbs OC/hr, from equation 8.4-22, p. 8.4-22, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).

M = vapor molecular weight, lb/lb-mole, 77.22 lb/lb-mole @ 90°F (550°R).

A = surface area of exposure or opening of tank, ft², = 18.33 ft².

P = vapor pressure of material, psia, 1.28 psia.

3600 = 3600 sec/hr.

R = universal gas constant at 1 atmosphere of pressure, 10.73 psia x ft³/(°R x lb-mole).

T = maximum temperature of loaded material, °R, 90°F + 460 = 550°R.

Hrs = Maximum hours of the mixing operation, 24 hours/day.

The daily OC limitation of 66.0 lbs/day is greater than or equal to the potential to emit for this emissions unit. Therefore, no record keeping,

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deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation.

- e. Emission Limitation: The OC rate shall not exceed 12.04 tons/year.

Applicable Compliance Method: Potential annual emissions may be estimated by the following equation:

$$OC(YR) = \{ \text{Annual Summation of } [OC_Total(DAY)] \} \times \text{ton OC} / 2,000 \text{ lbs OC.}$$

where:

OC(YR) = potential OC emissions, in tons/year.

OC_Total(DAY) = potential OC emissions from loading operations and mixing operations, in lbs/day, as specified in section E.1.c.

- f. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:

- i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
- ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, OC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.

2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used

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to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

F. Miscellaneous Requirements

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:
 - a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vicking;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;
P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
P030 - Mixer 10, Ashland Mixer No. 10.
 - b. CAB Area Emissions Unit(s):
P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
P006 - Mix Mixer 9; Hockmeyer HVR-50;
P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;

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P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
 P020 - Mix Tank 25, "Tank/Mixer 25";
 P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
 P024 - Mixer 19, "Hockmeyer 125 HP";
 P032 - Pigment Dispersion Mixer 20; and
 P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".

- d. Solvent Area Emissions Units:
 P034 - Pigment Dispersion Sand Mill 12, "Supermill";
 P035 - Pigment Dispersion Sand Mill 18 (Netzsch);
 P036 - Pigment Dispersion Sand Mill 19 (Netzsch); and
 P037 - Pigment Dispersion Packaging Line.
- e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
- f. Packaging Area: Packaging of non-VOC and low VOC products, a de minimis operation.
3. The following emissions units located at this facility, including any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit are subject to the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs specified in Section A.2.c., but do not have operational restrictions for VOC nor HAP usages:
- P027 - Hockmeyer CMX 100 Potwasher
 P028 - Cellulose Acetate Butyrate (CAB) Process Mix Area tanks 31, 32 & 34 with a dust collector(s);
 T006 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 18;
 T007 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 17;
 T008 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 16;
 T009 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 12;
 T010 - 8,800 gallon storage tank for polyester polyol, tank no. 13;
 T011 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 14;
 T012 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 15;
 T013 - 12,000 gallon storage tank for styrene monomer, tank no. 11;
 T016 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 26;
 T017 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 19; and
 T018 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 20.
4. The following PTIs are modified and superceded by the emissions limits, operational

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restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.b., B.1. through B.3., C.3., C.4., D.2., D.3., E.1.f., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:

- a. PTI 02-16412 for P008 and P020;
 - b. PTI 02-04169 for P009, P010 and P011;
 - c. PTI 02-04312 for P012;
 - d. PTI 02-07715 for P013;
 - e. PTI 02-08592 for P015;
 - f. PTI 02-08639 for P016, P019;
 - g. PTI 02-10733 for P023;
 - h. PTI 02-11723 for P024; and
 - i. PTI 02-22040 for P030 and P031.
5. Pulse jet baghouse (DC007) also controls the particulate emissions from the following emissions units: P008, P010, P013, P015, P023, P024, P028 and P030.

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

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

Operations, Property, and/or Equipment - (P034) - Pigment dispersion sand mill no. 12; Co. ID. Supermill - SM012

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05 (A)(3)(b)	See section A.2.a.
OAC rule 3745-31-05(C)	See section A.2.b.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to no chemical reaction taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.

2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential emissions for OC is less than ten tons per year.

Maximum, uncontrolled OC emissions may be estimated by the following method(s):

- i. Maximum emissions of 1.19 lb OC/hr from surface evaporation during mixing of were estimated with equation 8.4-22, p. 8.4-22, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- ii. Maximum annual emissions may be estimated by the following equation:

$$OC(YR) = OC_Mix(HR) \times 8,760 \text{ hrs/yr} \times 2,000 \text{ lbs OC/ton OC}$$
 which can be 5.22 tons OC/yr.

- 2.b** Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:
- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
 - ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.
 - iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
 - iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with Sections A.2.b.i through A.2.b.iii. by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in Sections C.1. and C.2. and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emissions limitations in Sections A.2.b.i through A.2.b.iii. is assumed as long as the permittee does not manufacture an intermediate product or a product that results in more emissions than the "worst case",

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presented in the air permit to install application number 02-22571 and its supporting documentation, which includes the number of gallons processed, as listed in Section B. of this permit.

B. Operational Restrictions

1. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.b.i. and A.2.b.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672
1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

2. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.b.ii. and A.2.b.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

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Facility ID: 0204010285

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<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	50,348
1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128

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1-10	503,475
1-11	553,823
1-12	604,170

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

3. The maximum annual usage for the emissions units specified in Section F.2., corresponding Sections A.2.b.iii. and A.2.b.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:

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- a. The name and/or identification number of each material;
 - b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative HAP emissions, in tons;
2. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
- a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
 - c. the usage listed in term B.2 from production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar

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months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.

- e. the usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.3 for each calendar month.
3. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";
or

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- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/\text{X} \times 5/\text{Y} = 4 \text{ TLV}/\text{XY} = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

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4. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations *of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.*

5. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

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- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
6. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;
 - b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.

Emissions Unit ID: **P034**

2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
3. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

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- a. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:

- i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
 - ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, OC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.
2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

F. Miscellaneous Requirements

Emissions Unit ID: **P034**

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:
 - a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vicking;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;
P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
P030 - Mixer 10, Ashland Mixer No. 10.
 - b. CAB Area Emissions Unit(s):
P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
P006 - Mix Mixer 9; Hockmeyer HVR-50;
P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;
P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
P020 - Mix Tank 25, "Tank/Mixer 25";
P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
P024 - Mixer 19, "Hockmeyer 125 HP";
P032 - Pigment Dispersion Mixer 20; and
P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".
 - d. Solvent Area Emissions Units:
P034 - Pigment Dispersion Sand Mill 12, "Supermill";
P035 - Pigment Dispersion Sand Mill 18 (Netzsch);
P036 - Pigment Dispersion Sand Mill 19 (Netzsch); and
P037 - Pigment Dispersion Packaging Line.
 - e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
 - f. Packaging Area: Packaging of non-VOC and low VOC products, a de minimis

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operation.

3. The following emissions units located at this facility, including any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit are subject to the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs specified in Section A.2.c., but do not have operational restrictions for VOC nor HAP usages:

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P027 - Hockmeyer CMX 100 Potwasher

P028 - Cellulose Acetate Butyrate (CAB) Process Mix Area tanks 31, 32 & 34 with a dust collector(s);

T006 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 18;

T007 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 17;

T008 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 16;

T009 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 12;

*T010 - 8,800 gallon storage tank for polyester polyol, tank no. 13;**T011 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 14;**T012 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 15;**T013 - 12,000 gallon storage tank for styrene monomer, tank no. 11;**T016 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 26;**T017 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 19; and**T018 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 20.*

- 4.** The following PTIs are modified and superceded by the emissions limits, operational restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.b., B.1. through B.3., C.1., C.2., D.1. D.2., E.1.a., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:

- a. PTI 02-16412 for P008 and P020;
- b. PTI 02-04169 for P009, P010 and P011;
- c. PTI 02-04312 for P012;
- d. PTI 02-07715 for P013;
- e. PTI 02-08592 for P015;
- f. PTI 02-08639 for P016, P019;
- g. PTI 02-10733 for P023;
- h. PTI 02-11723 for P024; and
- i. PTI 02-22040 for P030 and P031.

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

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

Operations, Property, and/or Equipment - (P035) - Pigment dispersion sand mill no. 18; Co. ID Netzch mill - SM018

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See section A.2.a.
OAC rule 3745-31-05(C)	See section A.2.b.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to no chemical reaction taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.

2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential emissions for OC is less than ten tons per year.

Maximum, uncontrolled OC emissions may be estimated by the following method(s):

- i. Maximum emissions of 1.19 lb OC/hr from surface evaporation during mixing of were estimated with equation 8.4-22, p. 8.4-22, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- ii. Maximum annual emissions may be estimated by the following equation:

$$OC(YR) = OC_Mix(HR) \times 8,760 \text{ hrs/yr} \times 2,000 \text{ lbs OC/ton OC}$$
 which can be 5.22 tons OC/yr.

- 2.b** Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:
- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
 - ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.
 - iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
 - iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with Sections A.2.b.i through A.2.b.iii. by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in Sections C.1. and C.2. and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emissions limitations in Sections A.2.b.i through A.2.b.iii. is assumed as long as the permittee does not manufacture an intermediate product or a product that results in more emissions than the "worst case",

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presented in the air permit to install application number 02-22571 and its supporting documentation, which includes the number of gallons processed, as listed in Section B. of this permit.

B. Operational Restrictions

1. The maximum usage for the emissions units specified in Section F.2., corresponding to terms A.2.b.i. and A.2.b.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672
1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

2. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Sections A.2.b.ii. and A.2.b.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

Plasticolors, Inc

DTI Application: 02 22574

Facility ID: 0204010285Emissions Unit ID: **P035**

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	50,348
1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128

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1-10	503,475
1-11	553,823
1-12	604,170

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

3. The maximum annual usage for the emissions units specified in Section F.2., corresponding to term A.2.b.iii. and A.2.b.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:

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- a. The name and/or identification number of each material;
 - b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative HAP emissions, in tons;
2. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
- a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
 - c. the usage listed in term B.2 from production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar

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months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.

- e. the usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the usage listed in term B.3 for each calendar month.
3. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American

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Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/\text{X} \times 5/\text{Y} = 4 \text{ TLV}/\text{XY} = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Toxic Contaminant: xylene
 TLV (mg/m³): 434.2
 Maximum Hourly Emission Rate (lbs/hr): 14.04
 Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6
 MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene
 TLV (mg/m³): 434.2
 Maximum Hourly Emission Rate (lbs/hr): 14.04
 Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6
 MAGLC (ug/m³): 10,340

The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

4. Prior to making any physical changes to or changes in the method of operation of the

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emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a *modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.*

5. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each

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significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
6. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Sections F.2. and F.3. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;
 - b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the

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following:

- a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
3. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

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- a. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:

- i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
 - ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, OC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.
2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

F. Miscellaneous Requirements

Emissions Unit ID: P035

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:
 - a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vicking;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;
P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
P030 - Mixer 10, Ashland Mixer No. 10.
 - b. CAB Area Emissions Unit(s):
P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
P006 - Mix Mixer 9; Hockmeyer HVR-50;
P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;
P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
P020 - Mix Tank 25, "Tank/Mixer 25";
P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
P024 - Mixer 19, "Hockmeyer 125 HP";
P032 - Pigment Dispersion Mixer 20; and
P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".
 - d. Solvent Area Emissions Units:
P034 - Pigment Dispersion Sand Mill 12, "Supermill";
P035 - Pigment Dispersion Sand Mill 18 (Netzsch);
P036 - Pigment Dispersion Sand Mill 19 (Netzsch); and
P037 - Pigment Dispersion Packaging Line.
 - e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
 - f. Packaging Area: Packaging of non-VOC and low VOC products, a deminimis

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operation.

3. The following emissions units located at this facility, including any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit are subject to the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs specified in Section A.2.c., but do not have operational restrictions for VOC nor HAP usages:

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P027 - Hockmeyer CMX 100 Potwasher

P028 - Cellulose Acetate Butyrate (CAB) Process Mix Area tanks 31, 32 & 34 with a dust collector(s);

T006 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 18;

T007 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 17;

T008 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 16;

T009 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 12;

T010 - 8,800 gallon storage tank for polyester polyol, tank no. 13;

T011 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 14;

T012 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 15;

T013 - 12,000 gallon storage tank for styrene monomer, tank no. 11;

T016 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 26;

T017 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 19; and

T018 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 20.

4. The following PTIs are modified and superceded by the emissions limits, operational restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.b., B.1. through B.3., C.1., C.2., D.1. D.2., E.1.a., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:

- a. PTI 02-16412 for P008 and P020;
- b. PTI 02-04169 for P009, P010 and P011;
- c. PTI 02-04312 for P012;
- d. PTI 02-07715 for P013;
- e. PTI 02-08592 for P015;
- f. PTI 02-08639 for P016, P019;
- g. PTI 02-10733 for P023;
- h. PTI 02-11723 for P024; and
- i. PTI 02-22040 for P030 and P031.

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

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

Operations, Property, and/or Equipment - (P036) - Pigment dispersion sand mill no. 19; Co. ID Netzch mill - SM019

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See section A.2.a.
OAC rule 3745-31-05(C)	See section A.2.b.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to no chemical reaction taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.

2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential emissions for OC is less than ten tons per year.

Maximum, uncontrolled OC emissions may be estimated by the following method(s):

- i. Maximum emissions of 1.19 lb OC/hr from surface evaporation during mixing of were estimated with equation 8.4-22, p. 8.4-22, section 4.4, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- ii. Maximum annual emissions may be estimated by the following equation:

$$OC(YR) = OC_Mix(HR) \times 8,760 \text{ hrs/yr} \times 2,000 \text{ lbs OC/ton OC}$$
 which can be 5.22 tons OC/yr.

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- 2.b.** Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:
- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
 - ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.
 - iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
 - iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with terms A.2.b.i thru iii by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in terms C.1 and 2 and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emission limitations in terms A.2.b.i thru iii is assumed as long as the permittee does not manufacture a coating that results in more emissions than the "worse case" coating that is listed in air permit to install application number 02-22571 and it's

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supporting documentation including the number of gallons produced listed in section B of this permit.

B. Operational Restrictions

1. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.i. and A.2.b.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672
1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

2. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.ii. and A.2.b.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
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1	50,348
1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128
1-10	503,475
1-11	553,823
1-12	604,170

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

3. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.iii. and A.2.b.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. The name and/or identification number of each material;
 - b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative HAP emissions, in tons;
2. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of

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- the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
- c. the usage listed in term B.2 from production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.
 - e. the usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.3 for each calendar month.
3. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic

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compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/\text{X} \times 5/\text{Y} = 4 \text{ TLV}/\text{XY} = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

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The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

4. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

5. The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
6. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Sections F.2. and F.3. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar

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months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;

- b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
3. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1. of these terms and conditions shall be determined in

accordance with the following methods:

- a. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:

- i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
 - ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, VOC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.
2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

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F. Miscellaneous Requirements

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:

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- a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vickeing;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;
P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
P030 - Mixer 10, Ashland Mixer No. 10.
 - b. CAB Area Emissions Unit(s):
P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
P006 - Mix Mixer 9; Hockmeyer HVR-50;
P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;
P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
P020 - Mix Tank 25, "Tank/Mixer 25";
P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
P024 - Mixer 19, "Hockmeyer 125 HP";
P032 - Pigment Dispersion Mixer 20; and
P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".
 - d. Solvent Area Emissions Units:
P034 - Pigment Dispersion Sand Mill 12, "Supermill";
P035 - Pigment Dispersion Sand Mill 18 (Netzsch);
P036 - Pigment Dispersion Sand Mill 19 (Netzsch); and
P037 - Pigment Dispersion Packaging Line.
 - e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
 - f. Packaging Area: Packaging of non-VOC and low VOC products, a de minimis operation.
3. The following emissions units located at this facility, including any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit are subject to the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs specified in Section A.2.c., but do not have operational restrictions for VOC nor HAP usages:

P027 - Hockmeyer CMX 100 Potwasher

P028 - Cellulose Acetate Butyrate (CAB) Process Mix Area tanks 31, 32 & 34 with a dust collector(s);

T006 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 18;

T007 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 17;

T008 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 16;

T009 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 12;

T010 - 8,800 gallon storage tank for polyester polyol, tank no. 13;

T011 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 14;

T012 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 15;

T013 - 12,000 gallon storage tank for styrene monomer, tank no. 11;

T016 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 26;

T017 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 19; and

T018 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 20.

4. The following PTIs are modified and superceded by the emissions limits, operational restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.b., B.1. through B.3., C.1., C.2., D.1. D.2., E.1.a., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:
 - a. PTI 02-16412 for P008 and P020;
 - b. PTI 02-04169 for P009, P010 and P011;
 - c. PTI 02-04312 for P012;
 - d. PTI 02-07715 for P013;
 - e. PTI 02-08592 for P015;
 - f. PTI 02-08639 for P016, P019;
 - g. PTI 02-10733 for P023;
 - h. PTI 02-11723 for P024; and
 - i. PTI 02-22040 for P030 and P031.

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

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

Operations, Property, and/or Equipment - (P037) - Pigment dispersion products packaging line

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)(b)	See section A.2.a.
OAC rule 3745-31-05(C)	See section A.2.b.
OAC rule 3745-21-07(G)	Exempt from the mass emission and control requirements due to just filling of product taking place in this emissions unit due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held on July 18, 2002.

2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential emissions for OC is less than ten tons per year.

Maximum, uncontrolled OC emissions may be estimated by the following methods:

- i. Maximum emissions of 2.14 lbs OC/hr from materials loading were estimated with equation 8.4-1, p. 8.4-4, section 4.1, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05).
- ii. Maximum annual emissions may be estimated by the following equation: $OC(YR) = [OC_Load(HR)] \times 8,760 \text{ hrs/yr} \times 2,000 \text{ lbs OC/ton OC}$, which can be 9.38 tons OC/yr.

- 2.b** Permit to Install 02-22571 for this air contaminant source takes into account the following voluntary restrictions, regarding the emissions units specified in section F.2., as proposed by the permittee for the purpose of avoiding the Lowest Achievable Emissions Rate (LAER) and Emissions Offset requirements under OAC rules 3745-31-21 through 3745-31-27 as well as avoiding Title V requirements under OAC rules 3745-77-02 through 3745-77-10:
- i. The emissions of volatile organic compounds (VOCs) from the emissions units, specified in Sections F.2. and F.3., shall not exceed 99.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 6,133,613 gallons of VOC per year, based upon a rolling, 12-month summation.
 - ii. The emissions of each single hazard air pollutant (HAP) from the emissions units, specified in Sections F. and F.3., shall not exceed 9.9 tons/year, based on a rolling 12-month summation, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 604,170 gallons of each single HAP per year, based upon a rolling, 12-month summation.
 - iii. The emissions of combined HAPs from the emissions units, specified in Sections F.2. and F.3., shall not exceed 24.9 tons/year, shall not exceed 24.9 tons/year, and shall be achieved by restricting the maximum cumulative usage of materials from emissions units specified in Section F.2. to 1,784,498 gallons of combined HAPs based on a rolling 12-month summation.
 - iv. In lieu of an OC, single HAP, and combined HAP content limitations due to the large number of different content values of the different products produced, the permittee shall show compliance with Sections A.2.b.i through A.2.b.iii. by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities" and the record keeping requirements listed in Sections C.1. and C.2. and the support document listed in and for air permit to install application number 02-22571. Therefore, compliance with the emissions limitations in Sections A.2.b.i through A.2.b.iii. is assumed as long as the permittee does not manufacture an intermediate product or a product that results in more emissions than the "worst case",

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presented in the air permit to install application number 02-22571 and its supporting documentation, which includes the number of gallons processed, as listed in Section B. of this permit.

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B. Operational Restrictions

1. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.i. and A.2.b.iv., shall not exceed 6,133,613 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	511,134
1-2	1,022,269
1-3	1,533,403
1-4	2,044,538
1-5	2,555,672
1-6	3,066,807
1-7	3,577,941
1-8	4,089,075
1-9	4,600,210
1-10	5,111,344
1-11	5,622,479
1-12	6,133,613

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

2. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.ii. and A.2.b.iv., shall not exceed 604,170 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	50,348

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1-2	100,695
1-3	151,043
1-4	201,390
1-5	251,738
1-6	302,085
1-7	352,433
1-8	402,780
1-9	453,128
1-10	503,475
1-11	553,823
1-12	604,170

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

3. The maximum annual usage for the emissions units specified in Section F.2., corresponding to Section A.2.b.iii. and A.2.b.iv., shall not exceed 1,784,498 gallons, based upon a rolling, 12-month summation of the usage from production and cleanup materials. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Usage, in Gallons</u>
1	148,708
1-2	297,416
1-3	446,125
1-4	594,833
1-5	743,541
1-6	892,249
1-7	1,040,957
1-8	1,189,666
1-9	1,338,374
1-10	1,487,082
1-11	1,635,790
1-12	1,784,498

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual usage limitation shall be based

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upon a rolling, 12-month summation of the usage figures.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. The name and/or identification number of each material;
 - b. The weight of each material, in pounds;
 - c. The volume(s), in gallons, of each material;
 - d. The VOC content of each material employed, in percent by volume;
 - e. The individual HAP content for each HAP in each material, in percent by volume;
 - f. The combined HAP contents in each material, in percent by volume;
 - g. The rolling 12-month VOC emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative VOC emissions, in tons;
 - h. The rolling 12-month single HAP emissions for each HAP, in tons. During the first 12-months of operation or after permit issuance, the cumulative single HAP emissions, in tons; and
 - i. The rolling 12-month combined HAP emissions, in tons. During the first 12-months of operation or after permit issuance, the cumulative HAP emissions, in tons.
2. The permittee shall maintain monthly records of the following information for production and cleanup materials employed at the emissions units identified in Section F.2.:
 - a. the usage listed in term B.1 from production and cleanup materials for each month;
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.1. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit,

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- the permittee shall record the cumulative usage listed in term B.1 for each calendar month.
- c. the usage listed in term B.2 from production and cleanup materials for each month;
 - d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.2. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.2 for each calendar month.
 - e. the usage listed in term B.3 from production and cleanup materials for each month; and
 - f. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the usage figures listed in term B.3. Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative usage listed in term B.3 for each calendar month.
3. The permit to install for these emissions unit(s) [P032 - P037] was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been

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documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" as 24 hours per day and "Y" as 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$

$$\text{TLV}/10 \times 8/24 \times 5/7 = 4 \text{ TLV}/(24 \times 7) = \text{TLV}/42 = \text{MAGLC}$$

- d. The following summarizes the results of dispersion modeling for the significant "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

Toxic Contaminant: ethylbenzene

TLV (mg/m³): 434.2

Maximum Hourly Emission Rate (lbs/hr): 14.04

Predicted 1-Hour Maximum Ground-Level Concentration () (ug/m³): 417.6

MAGLC (ug/m³): 10,340

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The permittee, has demonstrated that emissions of xylene and ethylbenzene, from emissions unit(s) [P032 - P037], is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

4. Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

5. The permittee shall collect, record, and retain the following information for each toxic

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evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
6. The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs from the emissions units specified in Sections F.2. and F.3. exceeded 99.9 tons VOCs/yr, 9.9 tons/yr of each single HAP, and 24.9 tons combined HAPs/yr, or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs emissions levels;

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- b. For each deviation, the actual rolling 12-month emissions of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the cumulative emissions of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each month during which exceedances of the rolling, 12-month limitation(s) on gallon usages of VOCs, single HAPs and combined HAPs from the emissions units specified in Section F.2. exceeded 6,133,613 gallons VOCs, 604,170 gallons of each single HAP, and 1,784,498 gallons of combined HAPs; or for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative VOCs, single HAPs and combined HAPs usage levels.
 - b. For each deviation, the actual rolling 12-month usages of VOCs, single HAPs or combined HAPs, or during the first 12 months of operation or permit issuance, the actual cumulative usages, in gallons, of VOCs, single HAPs and combined HAPs. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A.2. of this permit.
3. The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

E. Testing Requirements

1. Compliance with the allowable emissions limitations and control measures requirements in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation(s): 99.9 tons/year VOC, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.;

9.9 tons/year of each single HAP, based on a rolling 12-month summation of the emissions from the emissions units specified in sections F.2. and F.3.; and

24.9 tons/year of combined HAPs, based on a rolling 12-month summation of the emissions from emissions units specified in sections F.2. and F.3.

Applicable Compliance Method: Compliance shall be based upon the following:
 - i. For emissions units, specified in section F.2., that are subject to the voluntary restrictions for VOC and HAP usages specified in section A.2.c., the record keeping requirements in section C.4. and maintenance of a rolling, 12-month summation of the specified emissions, required in section C.3.
 - ii. For emissions units, specified in section F.3., that are not subject to the voluntary restrictions for VOC and HAP usages, OC emissions may be estimated by using the methods described in the Emission Inventory Improvement Program (EIIP), Chapter 8 "Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities or an alternative method as approved by the Ohio EPA.
2. U.S. EPA Method 24 (appendix A to 40 CFR part 60) or formulation data shall be used to determine the VOC content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the VOC content determination. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
3. U.S. EPA Method 311 (appendix A to 40 CFR part 63) or formulation data shall be used to determine the HAP content of production and cleanup materials. The permittee may request to use an alternative method or procedure for the HAP content determination.

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The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

F. Miscellaneous Requirements

1. This emissions unit is involved in the manufacture of pigment dispersions. The permittee does not produce coatings, as defined in 40 CFR 63.8105, and is therefore not subject to the New Emissions Standards for Hazardous Air Pollutants for Miscellaneous Coating Manufacturing, 40 CFR, Part 63, Subpart HHHHH.
2. Voluntary restrictions to limit potential facility wide emissions of VOCs, single HAPs and combined HAPs concern the following emissions units:
 - a. Ashland Area Emissions Units:
P009 - Tank Mixer 10, 6,000 Gallon Ashland Mix Tank, Stanwade 2, Vicking;
P010 - Tank Mixer 9, Ashland/Lightnin 74C - 7.5 Stanwade Blackmer GSX-2;
P011 - Tank Mixer 22, Ashland/Lightnin 74C - 7.5 Process Tank w/ Paddle;
P012 - Tank Mixer 21, Ashland/Lightnin 74C - 7.6 Process Tank w/ Paddle; and
P030 - Mixer 10, Ashland Mixer No. 10.
 - b. CAB Area Emissions Unit(s):
P027 - CMX-100 Pot Washer #4 (Hockmeyer).
 - c. Mix Area Emissions Units:
P006 - Mix Mixer 9; Hockmeyer HVR-50;
P008 - Mixer 11, Ashland/Hockmeyer HVR 50;
P013 - Mixer 12, "High Shear Mixer, Hockmeyer HVR 30";
P015 - Mixer 14, "25HP Low Speed Mixer, Jaygo LS 1030";
P016 - Mixer 13, 1, 4A, 4B gearless pony mixer;
P019 - NOR Mix Mixer 24, "750 Gallon Low Intensity Mixer";
P020 - Mix Tank 25, "Tank/Mixer 25";
P023 - Mixer 16, "High Shear, Cowles Moorehouse 410 VHV";
P024 - Mixer 19, "Hockmeyer 125 HP";
P032 - Pigment Dispersion Mixer 21; and
P033 - Pigment Dispersion Mixer 22, "Hockmeyer 125 HP".
 - d. Solvent Area Emissions Units:
P034 - Pigment Dispersion Sand Mill 12, "Supermill";
P035 - Pigment Dispersion Sand Mill 18 (Netzsch);

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P036 - Pigment Dispersion Sand Mill 19 (Netzsch; and
P037 - Pigment Dispersion Packaging Line.

- e. White Room Area Emissions Unit(s): P031 - White Room Mixer 7.
- f. Packaging Area: Packaging of non-VOC and low VOC products, a de minimis operation.

Issued: 2/26/2008

3. The following emissions units located at this facility, including any de minimis air contaminant sources, as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit are subject to the rolling, 12-month emissions limitation(s) on VOCs, single HAPs and combined HAPs specified in Section A.2.c., but do not have operational restrictions for VOC nor HAP usages:

P027 - Hockmeyer CMX 100 Potwasher
P028 - Cellulose Acetate Butyrate (CAB) Process Mix Area tanks 31, 32 & 34 with a dust collector(s);
T006 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 18;
T007 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 17;
T008 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 16;
T009 - 8,800 gallon storage tank for unsaturated polyester resin, tank no. 12;
T010 - 8,800 gallon storage tank for polyester polyol, tank no. 13;
T011 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 14;
T012 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 15;
T013 - 12,000 gallon storage tank for styrene monomer, tank no. 11;
T016 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 26;
T017 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 19; and
T018 - 8,800 gallon storage tank for polyester resin/styrene, tank no. 20.
4. The following PTIs are modified and superceded by the emissions limits, operational restrictions, monitoring and record keeping requirements, and the reporting requirements, in sections A.2.b., B.1. through B.3., C.1., C.2., D.1. D.2., E.1.a., E.2. and E.3. respectively, for facility wide emissions of VOCs, single HAPs and multiple HAPs, and facility wide gallon usages of VOCs, single HAPs and multiple HAPs:
 - a. PTI 02-16412 for P008 and P020;
 - b. PTI 02-04169 for P009, P010 and P011;
 - c. PTI 02-04312 for P012;
 - d. PTI 02-07715 for P013;
 - e. PTI 02-08592 for P015;
 - f. PTI 02-08639 for P016, P019;
 - g. PTI 02-10733 for P023;
 - h. PTI 02-11723 for P024; and
 - i. PTI 02-22040 for P030 and P031.

Issued: 2/26/2008

SIC CODE 2851 SCC CODE 3-01-014-01 EMISSIONS UNIT ID P032
 EMISSIONS UNIT DESCRIPTION Pigment dispersion mixer no. 20 with a fabric filter (DC007) to control particulate emissions

DATE Modified: Upon permit issuance

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Unclassified	0.178 lbs/hr	0.78	3.57	0.78
PM ₁₀	Attainment				
Sulfur Dioxide	Attainment				
Organic Compounds	Non-attainment	1.51 lbs/hr; 36.2 lbs/day	6.61	None	<10
Nitrogen Oxides	Attainment				
Carbon Monoxide	Attainment				
Lead	Unclassified				
Air Toxic - Xylene	Unclassified	0.302 lbs/hr	1.32	None	None
Air Toxic - Ethylbenzene	Unclassified	0.064 lbs/hr	0.28	None	None
Air Toxic - Toluene	Unclassified	0.004 lbs/hr	0.016	None	None

APPLICABLE FEDERAL RULES: NSPS? NESHAP? No. PSD? No. OFFSET POLICY? No.

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

0.78 TPY PE, per OAC rule 3745-31-05(C) w. use of 99% efficient dust control device (DC007). <10TPY OC potential emissions do not require BAT limits, per OAC 3745-31-05(C).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ 0.00 for OC, unknown for PE.

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

AIR TOXICS MODELING PERFORMED*? X, see file 0222571s.pdf YES NO

IDENTIFY THE AIR CONTAMINANTS: Xylene & ethylbenzene.

Emissions Unit ID: P037

SIC CODE 2851 SCC CODE 3-01-014-01 EMISSIONS UNIT ID P033
 EMISSIONS UNIT DESCRIPTION Pigment dispersion mixer no. 22 with a fabric filter (DC007) to control particulate emissions
 DATE Modified: upon permit issuance
 EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Unclassified	0.357 lb/hr	1.56	5.81	1.56
PM ₁₀	Attainment				
Sulfur Dioxide	Attainment				
Organic Compounds	Non-attainment	2.75 lbs/hr; 66.0 lbs/day	12.04	66.0 lbs/day	12.04
Nitrogen Oxides	Attainment				
Carbon Monoxide	Attainment				
Lead	Unclassified				
Air Toxic - Xylene	Unclassified	0.550 lb/hr	2.41	None	None
Air Toxic - Ethylbenzene	Unclassified	0.117 lb/hr	0.51	None	None
Air Toxic - Toluene	Unclassified	0.007 lb/hr	0.03	None	None

APPLICABLE FEDERAL RULES: NSPS? NESHAP? No. PSD? No. OFFSET POLICY? No.

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

1.56 TPY PE, per OAC rule 3745-31-05(C) w. use of 99% efficient dust control device (DC007). 66.0 lbs/day and 12.04 TPY OC, per emissions estimates derived from equations 8.4-1 and 8.4-22, section 4.1, EIIP (Emission Inventory Improvement Program), Vol. II, Chap. 8 Methods for Estimating Air Emissions from Paint, Ink and Other Coating Manufacturing Facilities (2/05), and are BAT per OAC rule 3745-31-05(A)(3).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0.00 for OC & unknown for PE.

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

AIR TOXICS MODELING PERFORMED*? X, see file 0222571s.pdf YES NO

IDENTIFY THE AIR CONTAMINANTS: Xylene & ethylbenzene.

Emissions Unit ID: P037

SIC CODE 2851 SCC CODE 3-01-014-99 EMISSIONS UNIT ID P034
 EMISSIONS UNIT DESCRIPTION Pigment dispersion sand mill no. 12; Co. ID. Supermill - SM012
 DATE INSTALLED - upon permit issuance.

EMISSIONS: (Click on bubble help for Air Quality Descriptions) - **FOR EACH MILL: P034, P035, OR P036**

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Unclassified				
PM ₁₀	Attainment				
Sulfur Dioxide	Attainment				
Organic Compounds	Non-attainment	1.19 lbs/hr	5.22	None.	<10
Nitrogen Oxides	Attainment				
Carbon Monoxide	Attainment				
Lead	Unclassified				
Air Toxic - Xylene	Unclassified	0.238 lb/hr	1.04	None	None
Air Toxic - Ethylbenzene	Unclassified	0.051 lb/hr	0.22	None	None
Air Toxic - Toluene	Unclassified	0.003 lb/hr	0.013	None	None

APPLICABLE FEDERAL RULES: NSPS? No. NESHAP? No. PSD? No. OFFSET POLICY? No.

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

. <10TPY OC potential emissions for each mill do not require BAT limits, per ORC 3704.03(T)(4).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0.00 for OC emissions.

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

AIR TOXICS MODELING PERFORMED*? X, see file 0222571s.pdf YES NO

IDENTIFY THE AIR CONTAMINANTS: Ethylbenzene & xylene.

Plasticolors, Inc
 PTI Application: 02-22571
 Issued: 2/26/2008

Facility ID: 0204010285

Emissions Unit ID: P037

SIC CODE 2851 SCC CODE 3-01-014-99 EMISSIONS UNIT ID P035
 EMISSIONS UNIT DESCRIPTION Pigment dispersion sand mill no. 18; Co. ID Netzch mill - SM018

DATE INSTALLED: Upon permit issuance

EMISSIONS: (Click on bubble help for Air Quality Descriptions) SAME AS EMISSIONS AT P034.

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES: NSPS? No. NESHAP? No. PSD? No. OFFSET POLICY? No.

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

<10TPY OC potential emissions for each mill do not require BAT limits, per ORC 3704.03(T)(4).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0.00 for OC emissions.

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

AIR TOXICS MODELING PERFORMED*? X, see file 0222571s.pdf YES NO

IDENTIFY THE AIR CONTAMINANTS: Xylene and ethylbenzene.

Issued: 2/26/2008

SIC CODE 2851 SCC CODE 3-01-014-99 EMISSIONS UNIT ID P036
 EMISSIONS UNIT DESCRIPTION Pigment dispersion sand mill no. 19; Co. ID Netzch mill - SM019

DATE INSTALLED: Upon permit issuance.

EMISSIONS: (Click on bubble help for Air Quality Descriptions) SAME AS EMISSIONS AT P034.

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀					
Sulfur Dioxide					
Organic Compounds					
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics					

APPLICABLE FEDERAL RULES: NSPS? NESHAP? No. PSD? No. OFFSET POLICY? No.

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
<10TPY OC potential emissions for each mill do not require BAT limits, per ORC 3704.03(T)(4).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0.00 for OC emissions.

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

AIR TOXICS MODELING X, see file 0222571s.pdf YES NO
 PERFORMED*? _____ _____

IDENTIFY THE AIR CONTAMINANTS: Ethylbenzene & xylene.

Plasticolors, Inc
PTI Application: 02-22571
Issued: 2/26/2008

Facility ID: 0204010285

Emissions Unit ID: **P037**

SIC CODE 2851 SCC CODE 3-01-014-99 EMISSIONS UNIT ID P037
 EMISSIONS UNIT DESCRIPTION Pigment dispersion products packaging line

DATE INSTALLED: Upon permit issuance.

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Unclassified				
PM ₁₀	Attainment				
Sulfur Dioxide	Attainment				
Organic Compounds	Non-attainment	2.14 lbs/hr	9.38	None.	<10
Nitrogen Oxides	Attainment				
Carbon Monoxide	Attainment				
Lead	Unclassified				
Air Toxic - Xylene	Unclassified	0.428 lb/hr	1.88	None	None
Air Toxic - Ethylbenzene	Unclassified	0.091 lb/hr	0.39	None	None
Air Toxic - Toluene	Unclassified	0.005 lb/hr	0.024	None	None

APPLICABLE FEDERAL RULES: NSPS? NESHAP? No. PSD? No. OFFSET POLICY? No.

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
 <10TPY OC potential emissions for each mill do not require BAT limits, per ORC 3704.03(T)(4).

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes.

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$0.00 for OC emissions.

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

AIR TOXICS MODELING X, see file 0222571s.pdf YES NO
 PERFORMED*?

IDENTIFY THE AIR CONTAMINANTS: Ethylbenzene and xylene.