

**Synthetic Minor Determination and/or  Netting Determination**

Permit To Install: 14-05932

A. Source Description

General Polymers is a coating manufacturing facility located in Cincinnati, Ohio. The facility mixes vinyls and epoxy to produce the coatings to the customer demand. Once the coatings are mixed, they are stored in one of six storage tanks.

B. Facility Emissions and Attainment Status

The annual allowable organic compounds (OC) emissions for the facility will be 77.08 tons per year (TPY). The annual allowable particulate emissions for the facility will be 12.14 TPY. The facility will be synthetic minor for hazardous air pollutants (HAPs). The facility is located in Hamilton County which is non-attainment for ozone and particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>).

C. Source Emissions

OC emissions are released during the batching process of these emissions units. The allowable emissions for both emissions units P026 and P027 is 13.4 TPY of OC (26.8 combined). Particulate emissions are released during the charging of the batch. The particulate emissions for both emissions units P026 and P027 is 2.6 TPY (5.2 combined).

D. Conclusion

The facility wants to modify their original permit to more accurately reflect their actual emissions by updating the source calculations. The addition of other mixers after this initial permit was issued made the facility a synthetic minor for potential HAP emissions. The facility will keep monthly HAP emission records to demonstrate compliance with the permit limitations. The facility will accept a facility-wide limitation of less than 10 tons per year for each individual HAP and less than 25 tons per year for combined HAPs to avoid the Title V requirements.



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL  
HAMILTON COUNTY**

**CERTIFIED MAIL**

Street Address:

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

Mailing Address:

Lazarus Gov.  
Center

**Application No:** 14-05932

**Fac ID:** 1431431877

**DATE:** 5/15/2007

General Polymers Corp  
David Falk  
145 Caldwell Dr  
Cincinnati, OH 45216

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43216-1049.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$1500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

*Michael W. Ahern*

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

CC: USEPA

HCDES

OH-KY-IN REG COUNCIL OF GOVTS

KY

IN

**HAMILTON COUNTY**

**PUBLIC NOTICE**

**ISSUANCE OF DRAFT PERMIT TO INSTALL 14-05932 FOR AN AIR CONTAMINANT SOURCE  
FOR General Polymers Corp**

On 5/15/2007 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **General Polymers Corp**, located at **145 Caldwell Dr, Cincinnati, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05932:

**Chapter 31 modification to PTI 14-04797 for two Schold mixers P026 and P027.**

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Brad Miller, Hamilton County Department of Environmental Services, 250 William Howard Taft Pkwy, Cincinnati, OH 45219-2660 [(513)946-7777]



**Permit To Install  
Terms and Conditions**

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

**DRAFT PERMIT TO INSTALL 14-05932**

Application Number: 14-05932  
Facility ID: 1431431877  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: General Polymers Corp  
Person to Contact: David Falk  
Address: 145 Caldwell Dr  
Cincinnati, OH 45216

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

**145 Caldwell Dr  
Cincinnati, Ohio**

Description of proposed emissions unit(s):

**Chapter 31 modification to PTI 14-04797 for two Schold mixers P026 and P027.**

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

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Chris Korleski  
Director

**General Polymers Corp**  
**PTI Application: 14-05932**  
**Issued: To be entered upon final issuance**  
**Part I - GENERAL TERMS AND CONDITIONS**

**Facility ID: 1431431877**

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

**1. Compliance Requirements**

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

**2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

**3. Records Retention Requirements**

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

**4. Inspections and Information Requests**

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

**General Polymers Corp**  
**PTI Application: 14-05932**

**Facility ID: 1431431877**

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

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

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

**General Polymers Corp**  
**PTI Application: 14-05932**

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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

**General Polymers Corp**

**Facility ID: 1431431877**

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Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

General Polymers Corp

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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>
OC	26.8
PE	5.2
PM10	5.2
Single HAP	9.9
Combined HAPs	24.9

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

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

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

#### Operations, Property, and/or Equipment - (P026) - Schold mixer with associated tubs

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions from the high speed mixer shall not exceed 15.3 pounds per hour and 13.4 tons per year.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B)(1).
OAC rule 3745-35-07(B)(1) Synthetic minor to avoid being subject to Title V permitting requirements	See term and condition A.2.d.
OAC rule 3745-17-07(A)(1)	See term and condition A.2.a.
OAC rule 3745-17-07(B)(1)	See term and condition A.2.b.
OAC rule 3745-17-08(B)	The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.  The permittee shall minimize or eliminate visible particulate emissions by the use of a cover and dust collector.
OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the fabric filter stack on the high speed mixer shall not exceed 3.03 lbs/hr.
OAC rule 3745-21-07(G)(2)	Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

ORC 3704.03(T)(4)	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) or particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source because the calculated annual emission rate for PE, PM10, and PM2.5 is less than ten tons per year, taking into account the federally enforceable rule limit of 3.03 lb of PE per hour under OAC rule 3745-17-11(B).</p> <p>See term E.1.b.</p>
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## 2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
- 2.b** Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average.
- 2.c** The hourly and annual PE, PM10, PM2.5 and OC emission limitations specified in Section A.1 are based on the emissions unit's potential to emit (PTE). Therefore, no record keeping, reporting or testing is required to demonstrate compliance with these emission limitations.
- 2.d** The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P006 (Shar Mixer), P007 (Hockmeyer Mixer 1), P008 (Hockmeyer Mixer 2), P010 (Hockmeyer HV-15 Mixer), P011 (Cowles Mixer), P013 (Epoxy Mixer), P017 (Hardener Tank), P021 (Tinting Area) P022 (Granule Mixer), P025 (Solvent Reclaim Still), P026 (Schold Mixer1), P027 (Schold Mixer 2), P028 (Myers Mixer), P029 (1,200 gallon epoxy clear base mixer), P030 (700 gallon reactor), P031 (300 gallon reactor), P032 (2,500 gallon reactor), P033 (Generac Generator), T001 (6,134 gallon storage tank #1), T002 (5,086 gallon storage tank #2), T003 (5,086 gallon storage tank #3), T004 (6,000 gallon storage tank #4), T005 (6,000 gallon storage tank #5) and T006 (6,134 gallon storage tank #6) as well as any other de minimus sources, permanent exempt pursuant to OAC rule 3745-31-03 located at the facility and any future installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

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The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, except for PE, PM10, and PM2.5 emissions.

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**B. Operational Restrictions**

None

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

1. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.d:
  - a. the name and identification number of each batch of coating produced containing a HAP(s);
  - b. the number of pounds of each batch of coating produced;
  - c. the individual Hazardous Air Pollutant (HAP) content for each HAP per pound of coating produced in pounds of individual HAP per pound of coating;
  - d. the total combined HAP content of each coating in pounds of combined HAPs per pound of coating;
  - e. the total individual HAP emissions for each HAP from all coatings produced in pounds or tons per month;
  - f. the total combined HAP emissions from all coatings produced in pounds or tons per month;
  - g. the updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
  - h. the updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

2. The permit to install for this emissions unit P026 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review

Emissions Unit ID: P026

of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: styrene

TLV (ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 1.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 286

MAGLC (ug/m3): 2027

3. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.)

#### D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton

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County Department of Environmental Services which identify all exceedances of the rolling, 12-month HAP emission limitations in term and condition A.2.d. If no deviations occurred during the reporting period, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

**E. Testing Requirements**

1. Compliance with the emission limitations in Section A of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitations:  
15.3 pound per hour of OC; and  
13.4 tons per year of OC.

**Applicable Compliance Methods:**

Compliance with the hourly emission limitation shall be determined by adding the vessel loading, surface evaporation and final loading emissions as calculated in Attachment 1 of air PTI application number 14-05932 submitted on March 16, 2007, assuming all emissions occur in one hour on the five hour batch. The annual OC emission rate was developed by multiplying the hourly OC emission rate of 15.3 lb/hr by the maximum operating schedule of 8760 hours/year, and dividing by 5 hours per batch and 2000 pounds/ton.

- b. Emission Limitations:  
3.03 pounds per hour of PE-PM10; and  
10.0 tons per year of PE-PM10.

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Emissions Unit ID: **P026**

Applicable Compliance Methods:

The hourly emission limitation of 3.03 lb of PE per hour is based on Figure 2 in OAC rule 3745-17-11(B). The actual emissions shall be calculated by:  $[(\text{production rate in pounds per hour}) \times (\% \text{ particulate}) \times (1\% \text{ AP-42 emission factor}) \times \{(95\% \text{ capture efficiency}) \times (1-99\% \text{ control efficiency})\}] + (\text{production rate in pounds per hour}) \times (\% \text{ particulate}) \times (1\% \text{ AP-42 emission factor}) \times \{1-(95\% \text{ capture efficiency})\}$ . The annual PE-PM10 emission rate shall be calculated by multiplying the hourly PE emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 5 hours per batch and 2000 pounds/ton. All PE are assumed to be PM10.

If required, compliance with the grain loading and/or hourly PE limitations shall be demonstrated through an emission source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1 - 5.

c. 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:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

d. Emissions Limitation:

Fugitive visible particulate emissions from this emissions source shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

e. Emission Limitations:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs.

Applicable Compliance Method:

Compliance with the HAP emission limitations in term and condition A.2.d will be determined by the record keeping requirements specified in term and condition C.1.

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**F. Miscellaneous Requirements**

1. 1. The terms and conditions of this air PTI shall supercede the terms and conditions of air PTI number 14-04797 issued on January 26, 2000, and modified on February 9, 2006.
2. The following terms and conditions of this permit are federally enforceable: A, C.1, D and E.

Issued: To be entered upon final issuance

**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 - (P027) - Schold mixer with associated tubs**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound (OC) emissions from the high speed mixer shall not exceed 15.3 pounds per hour and 13.4 tons per year.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B)(1).
OAC rule 3745-35-07(B)(1) Synthetic minor to avoid being subject to Title V permitting requirements	See term and condition A.2.d.
OAC rule 3745-17-07(A)(1)	See term and condition A.2.a.
OAC rule 3745-17-07(B)(1)	See term and condition A.2.b.
OAC rule 3745-17-08(B)	The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.  The permittee shall minimize or eliminate visible particulate emissions by the use of a cover and dust collector.
OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the fabric filter stack on the high speed mixer shall not exceed 3.03 lbs/hr.
OAC rule 3745-21-07(G)(2)	Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

ORC 3704.03(T)(4)	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) or particulate matter emissions 10 microns and less in diameter (PM10) from this air contaminant source because the calculated annual emission rate for PE, PM10 and PM2.5 is less than ten tons per year, taking into account the federally enforceable rule limit of 3.03 lb of PE per hour under OAC rule 3745-17-11(B).</p> <p>See term E.1.b.</p>
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## 2. Additional Terms and Conditions

- 2.a** Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
- 2.b** Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average.
- 2.c** The hourly and annual PE, PM10, PM2.5 and OC emission limitations specified in Section A.1 are based on the emissions unit's potential to emit (PTE). Therefore, no record keeping, reporting or testing is required to demonstrate compliance with these emission limitations.
- 2.d** The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P006 (Shar Mixer), P007 (Hockmeyer Mixer 1), P008 (Hockmeyer Mixer 2), P010 (Hockmeyer HV-15 Mixer), P011 (Cowles Mixer), P013 (Epoxy Mixer), P017 (Hardener Tank), P021 (Tinting Area) P022 (Granule Mixer), P025 (Solvent Reclaim Still), P026 (Schold Mixer1), P027 (Schold Mixer 2), P028 (Myers Mixer), P029 (1,200 gallon epoxy clear base mixer), P030 (700 gallon reactor), P031 (300 gallon reactor), P032 (2,500 gallon reactor), P033 (Generac Generator), T001 (6,134 gallon storage tank #1), T002 (5,086 gallon storage tank #2), T003 (5,086 gallon storage tank #3), T004 (6,000 gallon storage tank #4), T005 (6,000 gallon storage tank #5) and T006 (6,134 gallon storage tank #6) as well as any other de minimus sources, permanent exempt pursuant to OAC rule 3745-31-03 located at the facility and any future installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

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The permittee has existing records to demonstrate compliance with this limitation upon permit issuance.

- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, except for PE, PM10, and PM2.5 emissions.

**B. Operational Restrictions**

None

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

1. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.d:
  - a. the name and identification number of each batch of coating produced containing a HAP(s);
  - b. the number of pounds of each batch of coating produced;
  - c. the individual Hazardous Air Pollutant (HAP) content for each HAP per pound of coating produced in pounds of individual HAP per pound of coating;
  - d. the total combined HAP content of each coating in pounds of combined HAPs per pound of coating;
  - e. the total individual HAP emissions for each HAP from all coatings produced in pounds or tons per month;
  - f. the total combined HAP emissions from all coatings produced in pounds or tons per month;
  - g. the updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
  - h. the updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

Emissions Unit ID: P027

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

2. The permit to install for this emissions unit P026 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: styrene

TLV (ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 1.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 286

MAGLC (ug/m3): 2027

3. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

**D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month HAP emission limitations in term and condition A.2.d. If no deviations occurred during the reporting period, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

**E. Testing Requirements**

1. Compliance with the emission limitations in Section A of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitations:  
15.3 pound per hour of OC; and  
13.4 tons per year of OC.

Applicable Compliance Methods:

Compliance with the hourly emission limitation shall be determined by adding the vessel loading, surface evaporation and final loading emissions as calculated in Attachment 1 of PTI application 14-05932 submitted on March 16, 2007, assuming all emissions occur in one hour on the five hour batch. The annual OC emission rate was developed by multiplying the hourly OC emission rate of 15.3 lb/hr by the maximum operating schedule of 8760 hours/year, and dividing by 5 hours per batch and 2000 pounds/ton.

- b. Emission Limitations:

Emissions Unit ID: P027

3.03 pounds per hour of PE-PM10; and  
10.0 tons per year of PE-PM10.

The particulate emission rate at the control device outlet shall not exceed 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gas or no visible particulate emissions from the exhaust stack, whichever is less stringent.

Applicable Compliance Methods:

The hourly emission limitation of 3.03 lb of PE per hour is based on Figure 2 in OAC rule 3745-17-11(B). The actual emissions shall be calculated by:  $[(\text{production rate in pounds per hour}) \times (\% \text{ particulate}) \times (1\% \text{ AP-42 emission factor}) \times \{(95\% \text{ capture efficiency}) \times (1-99\% \text{ control efficiency})\}] + (\text{production rate in pounds per hour}) \times (\% \text{ particulate}) \times (1\% \text{ AP-42 emission factor}) \times \{1-(95\% \text{ capture efficiency})\}]$ . The annual PE-PM10 emission rate shall be calculated by multiplying the hourly PE emission rate by the maximum operating schedule of 8760 hours/year, and dividing by 5 hours per batch and 2000 pounds/ton. All PE are assumed to be PM10.

If required, compliance with the grain loading and/or hourly PE limitations shall be demonstrated through an emissions source test performed in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1 - 5.

- c. 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:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- d. Emission Limitation:  
Fugitive visible particulate emissions from this emissions source shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

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- e. Emission Limitations:  
9.9 TPY for any single HAP and 24.9 TPY for combined HAPs.

Applicable Compliance Method:

Compliance with the HAP emission limitations in term and condition A.2.d will be determined by the record keeping requirements specified in term and condition C.1.

**F. Miscellaneous Requirements**

1. 1. The terms and conditions of this air PTI shall supercede the terms and conditions of air PTI PTI number 14-04797 issued on January 26, 2000, and modified on February 9, 2006.
2. The following terms and conditions of this permit are federally enforceable: A, C.1, D and E.

General Polymers Corp  
 PTI Application: 14-05932  
 Issued: To be entered upon final issuance

Facility ID: 1431431877

Emissions Unit ID: P027

SIC CODE 2851 SCC CODE 3-01-014-01 EMISSIONS UNIT ID P026  
 EMISSIONS UNIT DESCRIPTION Schold mixer with associated tubs  
 DATE INSTALLED 09/1997

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	3.03 lbs/hr	2.59	3.03 lbs/hr	2.59
PM <sub>10</sub>	Attainment	3.03 lbs/hr	2.59	3.03 lbs/hr	2.59
Sulfur Dioxide					
Organic Compounds	Non Attainment	15.3 lbs/hr	13.4	15.3 lbs/hr	13.4
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?**

Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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

**TOXIC AIR CONTAMINANTS**

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

AIR TOXICS MODELING PERFORMED\*?           X           YES            NO

IDENTIFY THE AIR CONTAMINANTS:           styrene

**General Polymers Corp**  
**PTI Application: 14-05932**  
**Issued: To be entered upon final issuance**

**Facility ID: 1431431877**

Emissions Unit ID: **P027**

SIC CODE 2851 SCC CODE 3-01-014-01 EMISSIONS UNIT ID P027  
 EMISSIONS UNIT DESCRIPTION Schold mixer with associated tubs  
 DATE INSTALLED 09/1997

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

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	Attainment	3.03 lbs/hr	2.59	3.03 lbs/hr	2.59
PM <sub>10</sub>	Attainment	3.03 lbs/hr	2.59	3.03 lbs/hr	2.59
Sulfur Dioxide					
Organic Compounds	Non Attainment	15.3 lbs/hr	13.4	15.3 lbs/hr	13.4
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?

Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

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

### **TOXIC AIR CONTAMINANTS**

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

AIR TOXICS MODELING PERFORMED\*?       X       YES        NO

IDENTIFY THE AIR CONTAMINANTS: styrene