



Environmental  
Protection Agency

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

8/10/2010

KIRSTEN LAWSON  
BAYER MATERIALSCIENCE  
1111 O Neill Drive SE  
Hebron, OH 43025

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0145020221  
Permit Number: P0106206  
Permit Type: Initial Installation  
County: Licking

Certified Mail

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director 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, made payable to "Ohio Treasurer Kevin Boyce," 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

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-CDO





## Response to Comments

Response to comments for: Permit-To-Install and Operate

Facility ID:	0145020221
Facility Name:	BAYER MATERIALSCIENCE
Facility Description:	Custom compound purchased resins
Facility Address:	1111 ONeill Drive SE Hebron, OH 43025 Licking County
Permit #:	P0106206, Initial Installation
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Newark Advocate on 07/03/2010. The comment period ended on 08/02/2010.	
Hearing date (if held)	NA
Hearing Public Notice Date (if different from draft public notice)	NA

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: **No comments received.**





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
BAYER MATERIALSCIENCE**

Facility ID: 0145020221  
Permit Number: P0106206  
Permit Type: Initial Installation  
Issued: 8/10/2010  
Effective: 8/10/2010  
Expiration: 8/10/2015





Division of Air Pollution Control
Permit-to-Install and Operate
for
BAYER MATERIALSCIENCE

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## Authorization

Facility ID: 0145020221  
Application Number(s): A0039379  
Permit Number: P0106206  
Permit Description: FEPTIO to reclassify three small R&D thermoplastic resin lines as small batch production line and allow for the installation of a fourth small batch production line.  
Permit Type: Initial Installation  
Permit Fee: \$800.00  
Issue Date: 8/10/2010  
Effective Date: 8/10/2010  
Expiration Date: 8/10/2015  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

BAYER MATERIALSCIENCE  
1111 ONeill Drive SE  
Hebron, OH 43025

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Chris Korleski  
Director



## Authorization (continued)

Permit Number: P0106206  
Permit Description: FEPTIO to reclassify three small R&D thermoplastic resin lines as small batch production line and allow for the installation of a fourth small batch production line.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

**Group Name: Small Sample CCC Extruders**

<b>Emissions Unit ID:</b>	<b>P043</b>
Company Equipment ID:	CCC#1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P044</b>
Company Equipment ID:	CCC#2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P045</b>
Company Equipment ID:	CCC#3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P046</b>
Company Equipment ID:	CCC#4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

## **A. Standard Terms and Conditions**

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed

permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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<sup>1</sup> Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

## **B. Facility-Wide Terms and Conditions**

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.

## **C. Emissions Unit Terms and Conditions**



**1. Emissions Unit Group - Small Sample CCC Extruders: P043, P044, P045, P046,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P043	ZSK-25 Extruder
P044	ZSK-25 Extruder
P045	ZSK-26 Extruder
P046	ZSK-26 Extruder

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

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(1)f. and e)(4)

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c., b)(2)g. and h, d)(1)d. and e., and e)(2)a.i.

b) Applicable Emissions Limitations and/or Control Requirements

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

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Volatile organic compound (VOC) emissions shall not exceed 0.01 lbs/hour and 0.04 tons/year.</p> <p>Styrene emissions shall not exceed 0.005 lb/hour and 0.02 tons/year.</p> <p>See b)(2)a, and d - f below.</p> <p>The requirements of this rule also include compliance with requirements of OAC rule 3745-31-05(D)(1).</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-31-05(D)(1)	See section b)(2)g - h below.

- (2) Additional Terms and Conditions
- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
  - b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC is less than ten tons per year.
  - c. The emission unit's 0.006 lb VOC/hour, 0.02 ton VOC/year, 0.003 lb Styrene/hour and 0.01 ton Styrene/year emission limitations are based on the emission unit's potential to emit vented through the below referenced control equipment. Therefore, only the monitoring, record keeping or reporting requirements of the control equipment are necessary to ensure compliance with these emission limitations.
  - d. Emissions from this emission unit shall be vented to a carbon adsorber.
  - e. The carbon adsorber shall be operated and maintained according to manufacturer's specifications and recommendations.
  - f. The maximum process weight rate of the emission unit shall not exceed 250 lb/hour.
  - g. VOC emissions from emission units P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P035, P041, P042, P043, P044, P045, and P046 combined shall not exceed 99.9 tons per rolling, 12-month period.
  - h. The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title II of the Clean Air Act, from emission units P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P035, P041, P042, P043, P044, P045, and P046 combined shall not exceed 9.9 tons for any single HAP and 24.9 tons for any combination of HAPs, per rolling, 12-month period.
- c) Operational Restrictions
- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for emission units P022, P023, P024, P026, P027, P028, P029, P030, P033, P034, P035, P041, P042, P043, P044, P045, and P046.
- a. the name and production rate of each product produced by each extruder;
  - b. the name of each product produced and the associated emission factor for VOC and each HAP ( 1,3-butadiene, acrylonitrile, styrene, chlorobenzene, acrylonitrile, and chlorobenzene), in pounds per 1000 pounds of product, from each extruder;
  - c. the emission rate of VOC and each individual HAP ( 1,3-butadiene, acrylonitrile, styrene, and chlorobenzene), in pounds, from each extruder;

The total emission rate shall be quantified by summing the emission rate from each extruder. The emissions from each extruder shall be determined by summing stack emissions, for emission units P023, P027, P029, P030, and P034, with the stack and fugitive emissions for emission units P022, P024, P026, P028, P033, P035, P041, P042, P043, P044, P045, and P046. Emissions from emissions units P022, P023, P024, P026, P027, P028, P029, P030, P033, P034, P035, P041, and P042 shall be determined as prescribed in PTI No. 01-12098. Stack emissions from P043, P044, P045, and P046 shall be determined by multiplying the production rate by the appropriate stack emission factor\* by the control efficiency (1.0 - 0.95). Fugitive emissions from the extruders shall be determined by multiplying the production rate by the appropriate fugitive emission factor\*.

\*The permittee shall use the following worst case emission factors unless product specific emission factors are available and approved by the Central District Office:

VOC	= 0.465 lbs/1000 lbs throughput (Testing, 2003); (stack) = 0.017 lb/1000 lbs throughput (Testing, 2003); (fugitive)
Styrene	= 0.224 lbs/1000 lbs throughput (Testing, Oct. 2007); (stack) = 0.008 lb/1000 lbs throughput (Testing, Oct. 2007); (fugitive)
1,3 Butadiene	= 0.002 lb/1000 lbs throughput (Testing, Oct. 2007); (stack) = 0.00007 lb/1000 lbs throughput (Testing, Oct. 2007); (fugitive)
Acrylonitrile	= 0.020 lb/1000 lbs throughput (Testing, Oct. 2007); (stack) = 0.001 lb/1000 lbs throughput (Testing, Oct. 2007); (fugitive)

Chlorobenzene = 0.219 lb/1000 lbs throughput (Testing, Oct. 2007);  
(stack)  
= 0.008 lb/1000 lbs throughput (Testing, Oct. 2007);  
(fugitive)

Capture and control efficiency:

Capture efficiency at die face = 85% (based on testing witnessed by Ohio EPA 12/8/00)

Control equipment (carbon adsorber) = 95% control efficiency of VOC and any HAP (based on manufacturer specifications)

- d. the facility-wide emission rate of VOC, each individual HAP (1,3-butadiene, acrylonitrile, styrene, chlorobenzene) and combined HAPs, in tons; and
- e. the facility-wide rolling, 12-month summation of the emission rate of VOC, each individual HAP (1,3-butadiene, acrylonitrile, styrene, chlorobenzene) and combined HAPs, in tons.
- f. Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified FEPTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. any deviation from the VOC, individual HAP or combined HAPs rolling, 12-month emission limitations;
    - ii. any exceedances of the VOC and/or HAP emission factors (pounds of pollutant per 1000 pounds of product); and

- iii. any downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- b. actions that were taken to achieve compliance.
- c. the probable cause of each deviation (excursion);
- d. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- e. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

- (3) The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).
- (4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

VOC emissions from emission units P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P035, P041, and P042 combined shall not exceed 99.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping found in Section d) above.

- b. Emission Limitation:

The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title II of the Clean Air Act, from emission units P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P035, P041, and P042 combined shall not exceed 9.9 tons for any single HAP and 24.9 tons for any combination of HAPs, per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping found in Section d) above.

c. Emission Limitation:

VOC emissions shall not exceed 0.01 lbs/hour.

Applicable Compliance Method:

Compliance may be demonstrated by summing the stack and fugitive emissions. The stack emissions shall be determined by multiplying the emission unit's maximum capacity of 250 lbs product produced/hour by the stack emission factor of 0.465 lbs VOC/1000 lbs product (Testing, 2003 ) by the control efficiency (1.0-0.95). The fugitive emissions shall be determined by multiplying the emission unit's maximum capacity of 250 lbs product produced/hour by the fugitive emission factor of 0.017 lbs VOC/1000 lbs of product (Testing, Oct. 2007).

If required the following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):

40 CFR Part 60, Appendix A Methods 1 through 4, and 25 or 25A, or 40 CFR Part 63, Appendix A Method 320. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency at the die face shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

d. Emission Limitation:

VOC emissions shall not exceed 0.04 tons/yr.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the pound per hour emission rate by 8760 hours/year and dividing by 2000 lbs/ton.

e. Emission Limitation:

Styrene emissions shall not exceed 0.005 lb/hour.

Applicable Compliance Method:

Compliance may be demonstrated by summing the stack and fugitive emissions. The stack emissions shall be determined by multiplying the emission unit's maximum capacity of 250 lbs product produced/hour by the stack emission factor of 0.224 lbs Styrene/1000 lbs product (Testing, Oct. 2007) by the control efficiency (1.0-0.95). The fugitive emissions shall be determined by multiplying the emission unit's maximum capacity of 250 lbs product produced/hour by the fugitive emission factor of 0.008 lbs Styrene/1000 lbs of product (Testing, Oct. 2007).

If required the following test method(s) shall be employed to demonstrate compliance with the allowable emission limitation(s):

40 CFR Part 60, Appendix A Methods 1 through 4, and 18, or 40 CFR Part 63, Appendix A Method 320. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The capture efficiency at the die face shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

f. Emission Limitation:

Styrene emissions shall not exceed 0.02 tons/year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the pound per hour emission rate by 8760 hours/year and dividing by 2000 lbs/ton.

- (2) If required, the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- (3) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- (4) Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing

procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.