

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

5/21/2014

Certified Mail

Michael Murphy
BASF Corporation
1175 Martin Street
Greenville, OH 45331-1886

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0819070134
Permit Number: P0110546
Permit Type: Renewal
County: Darke

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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 Josh Mandel," 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: RAPCA



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
BASF Corporation**

Facility ID:	0819070134
Permit Number:	P0110546
Permit Type:	Renewal
Issued:	5/21/2014
Effective:	5/21/2014
Expiration:	5/21/2019



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

for
BASF Corporation

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Authorization

Facility ID: 0819070134
Application Number(s): A0045098, A0045640
Permit Number: P0110546
Permit Description: Renewal FEPTIO for 27 emissions units located at resins and coatings production facility.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 5/21/2014
Effective Date: 5/21/2014
Expiration Date: 5/21/2019
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

BASF Corporation
1175 Martin Street
Greenville, OH 45331

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

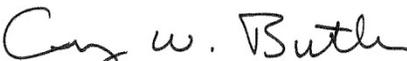
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

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


Craig W. Butler
Director



Authorization (continued)

Permit Number: P0110546

Permit Description: Renewal FEPTIO for 27 emissions units located at resins and coatings production facility.

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

- Emissions Unit ID: B007**
 Company Equipment ID: B-803A
 Superseded Permit Number: 08-04175
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: B010**
 Company Equipment ID: MG-840
 Superseded Permit Number: 08-04175
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: P021**
 Company Equipment ID: Water Stripping
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: P029**
 Company Equipment ID: Buflovak Stripping Operation
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: P031**
 Company Equipment ID: Solvent Recovery Fractionator
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: T001**
 Company Equipment ID: Tk238A
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: T029**
 Company Equipment ID: Storage Tanks
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

- Emissions Unit ID: T030**
 Company Equipment ID: T-110
 Superseded Permit Number: 08-04244
 General Permit Category and Type: Not Applicable

Group Name: mill systems

Emissions Unit ID:	P032
Company Equipment ID:	Mill System 301
Superseded Permit Number:	08-04669
General Permit Category and Type:	Not Applicable



Emissions Unit ID:	P033
Company Equipment ID:	Mill System 302
Superseded Permit Number:	08-04669
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P034
Company Equipment ID:	Mill System 303
Superseded Permit Number:	08-04669
General Permit Category andType:	Not Applicable

Group Name: reactors controlled by TO-I

Emissions Unit ID:	P001
Company Equipment ID:	Reactor Train A
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P008
Company Equipment ID:	Reactor Train D
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P009
Company Equipment ID:	Reactor Train B
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P010
Company Equipment ID:	Reactor Train C
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P012
Company Equipment ID:	Reactor Train Pilot
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P013
Company Equipment ID:	Reactor Train F
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P014
Company Equipment ID:	Reactor Train G
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	Reactor Train H
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P016
Company Equipment ID:	Reactor Train I
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P028
Company Equipment ID:	OEM Clearcoat Train
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable



Group Name: reactors controlled by TO-II

Emissions Unit ID:	P022
Company Equipment ID:	Reactor Train 1
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P023
Company Equipment ID:	Reactor Train 2
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P024
Company Equipment ID:	Reactor Train 3
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P025
Company Equipment ID:	Reactor Train 4
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable

Group Name: spray booths

Emissions Unit ID:	P027
Company Equipment ID:	QA Spray Booth #1
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable
Emissions Unit ID:	P030
Company Equipment ID:	QA Spray Booth #2
Superseded Permit Number:	08-04244
General Permit Category andType:	Not Applicable



Final Permit-to-Install and Operate
BASF Corporation
Permit Number: P0110546
Facility ID: 0819070134
Effective Date: 5/21/2014

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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] 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 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 emission 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.

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.



Final Permit-to-Install and Operate
BASF Corporation
Permit Number: P0110546
Facility ID: 0819070134
Effective Date: 5/21/2014

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.
2. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing 40 CFR Part 63, Subpart HHHHH, promulgated December 11, 2003. If the facility is subject to this rule, they will be defined as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the subpart, the permittee shall meet the notification requirements in 40 CFR 63.8070, according to the dates specified in that section (no later than 120 days after December 11, 2003) and in Subpart A of 40 CFR Part 63. If the facility is subject to the provisions of Subpart HHHHH they must comply with the provisions in accordance with the dates specified in 40 CFR 63.7995.
3. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12-month summations.
4. The permittee shall collect and record each month the following information for the entire facility:
 - a) The company identification of each product manufactured and/or materials processed for each product.
 - b) The amount of each material manufactured and/or processed, in gallons or pounds.
 - c) The individual Hazardous Air Pollutant (HAP) emissions for each material manufactured and/or processed, in pounds of individual HAP per gallon.
 - d) The total combined HAP emissions of each material manufactured and/or processed, in pounds of combined HAPs per gallon [i.e., the sum of all the individual HAP contents from c)].
 - e) The total number of clean-up batches.
 - f) The individual HAP emissions for each HAP for each cleanup batch, in pounds of individual HAP per batch.
 - g) The total combined HAP emissions for each cleanup batch, in pounds of combined HAPs per batch [i.e., the sum of all the individual HAP contents from f)].
 - h) The total individual HAP emission rate for all materials manufactured and/or processed and all cleanup batches, in tons.



- i) The total combined HAP emission rate for all materials manufactured and/or processed and all cleanup batches, in tons.
- j) The total individual HAP emission rate from all de minimis and/or exempt emission units, in tons.
- k) The total combined HAP emission rate from all de minimis and/or exempt emission units, in tons.
- l) The rolling, 12- month total individual HAP emission rate for each HAP, in tons.
- m) The rolling, 12-month total combined HAPs emission rate for all the HAPs, in tons.

*A listing of the HAPs can be found in Section 112 (b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local agency contact. This information does not have to be kept on a line-by-line basis.

5. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
- a) An identification of each month during which the rolling, 12-month individual HAP emission rate exceeded 9.9 tons, and the actual rolling, 12-month emission rate for each individual HAP for each such month (for the entire facility).
 - b) An identification of each month during which the rolling, 12-month total combined HAP emission rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emission rate for each such month (for the entire facility).

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

6. The permittee shall submit annual reports that specify the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.
7. 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE)

The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines. Although Ohio EPA has determined that this Maximum Achievable Control Technology NESHAP (MACT) applies to the engine(s) identified in this permit, at this time Ohio EPA is not accepting delegation for area sources subject to MACT requirements. Instead, U.S. EPA will retain the authority to enforce this standard for area sources. Please be advised, that all requirements associated with Part 63 Subpart ZZZZ are in effect and shall be enforced by U.S.



Final Permit-to-Install and Operate

BASF Corporation

Permit Number: P0110546

Facility ID: 0819070134

Effective Date: 5/21/2014

EPA. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.

Applicable requirements of this rule for stationary RICE engines differ according to whether the engine is new or existing, and whether the engine is located at an area source or major source of hazardous air pollutants (HAPs), and whether the engine is a compression ignition or a spark ignition engine. Engines of all horsepower located at an area source of HAP are classified as one of the following: existing engines if constructed before June 12, 2006; new engines if constructed on or after June 12, 2006; or reconstructed engines if reconstruction began on or after June 12, 2006. This facility is an area source of HAPs, and the emergency compression ignition (CI) RICE, located at the facility are potentially subject to the requirements of the NESHAP. The emergency RICE is limited to 100 hours/year for maintenance checks and readiness testing, and may be operated up to 50 hours/year in non-emergency situations as described in paragraphs (f)(1) through (4) of section 63.6640(f). The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response.

The existing emergency stationary emergency CI RICE, emission units B010, P035 and P036, were installed before 6/12/06 and located at an area source for HAPs. Therefore, in accordance with 40 CFR 63.6585(f), these sources are not are not subject to the General Provisions to 40 Part 63, Subpart A or 40 Part 63, Subpart ZZZZ, and no initial notification is required.



Final Permit-to-Install and Operate
BASF Corporation
Permit Number: P0110546
Facility ID: 0819070134
Effective Date: 5/21/2014

C. Emissions Unit Terms and Conditions



1. B007, B-803A

Operations, Property and/or Equipment Description:

60.3 mmBtu/hr natural gas/oil fired boiler, B-803A

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04175 issued 11/12/2002	<p>The particulate emissions (PE) from emissions unit B007 shall not exceed 1.24 tons per year (TPY).</p> <p>The sulfur dioxide (SO₂) emissions from emissions unit B007 shall not exceed 0.05 pound per mmBtu (lb/mmBtu) and 4.40 TPY.</p> <p>The carbon monoxide (CO) emissions from emissions unit B007 shall not exceed 0.08 lb/mmBtu and 10.42 TPY.</p> <p>The organic compound (OC) emissions from emissions unit B007 shall not exceed 0.005 lb/mmBtu and 0.68 TPY.</p> <p>The visible emissions opacity shall not exceed 5% opacity, as a 6-minute average, except during periods of startup</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>and shutdown.</p> <p>See b)(2)a.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B)(1), 3745-17-07(A)(1), 3745-17-07(A)(1), 3745-18-06(D), and 40 CFR Part 60 Subpart Dc.</p>
b.	<p>OAC rule 3745-31-05(D) (synthetic minor to avoid Title V) PTI 08-04175 issued 11/12/2002</p>	<p>The nitrogen oxide (NO_x) emissions from this emissions unit shall not exceed 0.14 lb/mmBtu and 12.40 TPY, as a rolling 12-month summation.</p> <p>See b)(2)a. and c)(2).</p>
c.	<p>OAC rule 3745-17-10(B)(1)</p>	<p>The PE emissions from emissions unit B007 shall not exceed 0.020 lb/mmBtu actual heat input.</p>
d.	<p>OAC rule 3745-17-07(A)(1)</p>	<p>The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
e.	<p>OAC rule 3745-18-06(D)</p>	<p>The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>
f.	<p>40 CFR Part 60 Subpart Dc</p>	<p>The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).</p>

(2) Additional Terms and Conditions

a. The annual SO₂ and PE emissions are based upon a maximum fuel oil usage of 1,240,000 gallons/year. The annual CO, OC, and NO_x emissions are based upon a maximum annual natural gas usage of 248 million cubic feet/year.

c) Operational Restrictions

(1) When burning fuel oil in this emissions unit, the permittee shall only use distillate oil (fuel oil number 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils"). The sulfur content of the distillate oil shall not exceed 0.05 percent sulfur by weight.

(2) The maximum natural gas usage in this emissions unit shall not exceed 248 million cubic feet/year, as a rolling 12-month summation.



In the event, the permittee substitutes the use of natural gas with fuel oil, then the following calculation shall be used to determine how much fuel oil can be substituted, in order to maintain compliance with the nitrogen oxide allowable emission limitation of 12.4 TPY, as a rolling 12-month summation:

$$[(20 \text{ lbsNOx}/1000 \text{ gals oil})(F) + 100 \text{ lbsNOx}/\text{mmscf})(G)] / 2000 \text{ lbs}/\text{ton} < 12.4 \text{ TPY NOx},$$

as a rolling 12-month summation

Where:

F = amount of distillate fuel oil burned, in gallons per year

G = amount of natural gas burned, in million cubic feet per year

d) **Monitoring and/or Recordkeeping Requirements**

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), the permittee's or oil supplier's analyses for sulfur content and heat content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.
- (2) The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.
- (3) When a shipment of fuel oil is received with a sulfur content higher than 0.05 percent by weight, the permittee shall maintain monthly records of the calculated sulfur content based upon a volume-weighted average of the calculated sulfur content for all shipments of oil, for only those months when oil is combusted in this emissions unit.
- (4) The permittee shall maintain monthly records of the following information:
 - a. The total amount of fuel burned in this emissions unit, in cubic feet of natural gas; and in gallons of distillate fuel oil.
 - b. The rolling, 12-month summation of natural gas, in cubic feet and distillate fuel oil, in gallons.
 - c. The calculated emission rate of nitrogen oxides, in tons.
 - d. The rolling, 12-month summation of the nitrogen oxides emission rates, in tons.
- (5) For each day during which the permittee burns a fuel other than natural gas or Number 2 distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.



e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of:
 - a. the 0.05 percent sulfur content limitation of the fuel;
 - b. each day when a fuel other than natural gas or number 2 distillate fuel was burned in this emissions unit;
 - c. the rolling, 12-month natural gas usage limitation; and
 - d. the rolling, 12-month NO_x emission limitation.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (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) The permittee shall submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.



f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The PE emissions shall not exceed 0.020 lb/mmBtu actual heat input as defined by rule.

Applicable Compliance Method:

For the use of natural gas, compliance shall be based upon multiplying the hourly gas burning capacity of the emissions unit (57,428.6 cu.ft/hr) by the emission factor of 1.9 lbs filterable particulate emissions/mmscf given for natural gas in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

For the use of distillate fuel oil, compliance shall be based upon multiplying the maximum fuel oil capacity of the emissions unit (431 gals/hr) by the emission factor of 2.0 lbs filterable particulate emissions/1000 gals given for fuel oil in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-1, 5/10, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

b. Emission Limitation:

The PE emissions shall not exceed 1.24 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual fuel oil usage (1,240,000 gallons/year) by the emission factor of 2.0 lbs filterable particulate emissions/1000 cited in f)(1)a., and dividing by 2000 lbs/ton.

Compliance with this limitation shall be determined by summing the particulate emissions from the burning of natural gas and fuel oil in this emissions based on the record keeping requirements in d)(4).

When burning natural gas, the particulate emissions shall be determined by multiplying the annual natural gas usage as determined in section d)(4), by the emission factor of 1.9 lbs filterable particulate emissions/mmscf cited in f)(1)a., and dividing by 2000 lbs/ton.

When burning fuel oil, the particulate emissions shall be determined by multiplying the annual fuel oil usage as determined in section d)(4), by the emission factor of 2.0 lbs filterable particulate emissions/1000 gal cited above, and dividing by 2000 lbs/ton.



c. Emission Limitation:

The SO₂ emissions shall not exceed 0.05 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum fuel oil capacity of the emissions unit (431 gals/hr) by the emission factor of 7.1 lbs-SO₂/1000 gals for distillate fuel oil, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). The emission factor was derived using the equation given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-1, 5/10, (142 x %S*, with S = 0.05). Compliance shall be based upon this for the use of fuel oil that complies with sulfur content limitation.

*S is the monthly, volume-weighted average of the weight percent of sulfur in the oil received during the month. For example, if the fuel oil is 1% sulfur, then S = 1.

For the use of natural gas, compliance shall be based upon multiplying the hourly gas burning capacity of the emissions unit (57,428.6 cu.ft/hr) 0.6 lb-SO₂/mmscf given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

If required, the permittee shall demonstrate compliance in accordance with Method 6, 40 CFR Part 60, Appendix A.

d. Emission Limitation:

The SO₂ emissions shall not exceed 4.40 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual fuel oil usage (1,240,000 gallons/year) by the emission factor of 7.1 lbs-SO₂/1000 gals fuel oil cited in f)(1)c., and dividing by 2000 lbs/ton.

Compliance with this limitation shall be determined by summing the SO₂ emissions from the burning of natural gas and fuel oil in this emissions based on the record keeping requirements in d)(4).

When burning natural gas, the SO₂ emissions shall be determined by multiplying the annual natural gas usage by the emission factor of 0.6 lb-SO₂/mmscf cited in f)(1)c., and dividing by 2000 lbs/ton.

When burning fuel oil, the SO₂ emissions shall be determined by multiplying the annual fuel oil usage by the emission factor of 7.1 lbs-SO₂/1000 gals fuel oil cited in f)(1)c., and dividing by 2000 lbs/ton.



e. Emission Limitation:

The NO_x emissions shall not exceed 0.14 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum fuel oil capacity of the emissions unit (431 gals/hr) by the emission factor of 20 lbsNO_x/1000 gals given for fuel oil in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-1, 5/10, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). Compliance shall be based upon this for the use of fuel oil.

For the use of natural gas, compliance shall be based upon multiplying the hourly gas burning capacity of the emissions unit (57,428.6 cu.ft/hr) by the emission factor of 100 lbsNO_x/mmscf given for natural gas in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1, 7/98, and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

If required, the permittee shall determine compliance with the limitation through emission testing conducted in accordance with Methods 1 through 4 and 7 or 7E of 40 CFR, Part 60, Appendix A.

f. Emission Limitation:

The NO_x emissions shall not exceed 12.40 TPY, as a rolling 12-month summation

Applicable Compliance Method:

This limitation was developed by multiplying the maximum annual gas usage (248 million cubic feet/year) by the emission factor cited in f)(1)e., and dividing by 2000 lbs/ton.

Compliance with the 12.40 TPY NO_x, as a rolling 12-month summation shall be determined through the record keeping requirements specified d)(4) and the following calculation using emission factors for natural gas and fuel oil cited in f)(1)e.:

$$[(20 \text{ lbsNO}_x/1000 \text{ gals oil})(F) + 100 \text{ lbsNO}_x/\text{mmscf})(G)] / 2000 \text{ lbs/ton} < 12.4 \text{ TPY NO}_x, \text{ as a rolling 12-month summation}$$

Where:

F = amount of distillate fuel oil burned, in gallons per year

G = amount of natural gas burned, in million cubic feet per year



g. Emission Limitation:

The CO emissions shall not exceed 0.08 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the emission factor for natural gas given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Tables 1.4-1, 7/98, (84 lbs CO/mmscf) by the maximum hourly natural gas usage (57,428.6 cubic foot/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). Compliance shall be based upon this for the use of natural gas.

For the use of fuel oil, compliance shall be based upon multiplying the emission factor for fuel oil given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-1, 5/10 (5 lbs CO/1000 gals) by the maximum hourly fuel oil usage (431 gals/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

If required, the permittee shall demonstrate compliance in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

h. Emission Limitation:

The CO emissions shall not exceed 10.42 TPY.

Applicable Compliance Method:

This limitation was developed by multiplying the maximum annual natural gas usage (248 million cubic feet/year) by the emission factor of 84 lbs CO/mmscf cited in f)(1)g., and dividing by 2000 lbs/ton.

Compliance with this limitation shall be determined by summing the CO emissions from the burning of natural gas and fuel oil in this emissions unit based upon the record keeping requirements specified d)(4).

When burning natural gas, the CO emissions shall be determined by multiplying the annual natural gas usage as determined in section d)(4), by the emission factor of 84 CO/mmscf cited in f)(1)g., and dividing by 2000 lbs/ton.

When burning fuel oil, the CO emissions shall be determined by multiplying the annual fuel oil usage as determined in section d)(4), by the emission factor of 5 lbs CO/1000 gals cited in f)(1)g., and dividing by 2000 lbs/ton.

i. Emission Limitation:

The OC emissions shall not exceed 0.005 lb/mmBtu.



Applicable Compliance Method:

This emissions limitation was developed by multiplying the emission factor for natural gas given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2, 7/98, (5.5 lbs OC/mmscf) by the maximum hourly natural gas usage (57,428.6 cubic foot/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr). Compliance shall be based upon this for the use of natural gas.

For the use of fuel oil, compliance shall be based upon multiplying the emission factor for distillate oil given in the AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.3-3, 5/10 (0.2 lbs OC/1000 gals) by the maximum hourly fuel oil usage (431 gals/hr), and dividing by the maximum hourly heat input capacity of the emissions unit (60.3 mmBtu/hr).

If required, the permittee shall demonstrate compliance in accordance with Methods 1 through 4 and 25 or 25A of 40 CFR Part 60, Appendix A.

j. Emission Limitation:

The OC emissions shall not exceed 0.68 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual natural gas usage (248 million cubic feet/year) by multiplying the emission factor cited in f)(1)i., and dividing by 2000 lbs/ton.

Compliance with this limitation shall be determined by summing the OC emissions from the burning of natural gas and fuel oil in this emissions unit based upon the record keeping requirements specified d)(4).

When burning natural gas, the OC emissions shall be determined by multiplying the annual natural gas usage as determined in d)(4), by the emission factor of 5.5 lbs OC/mmscf cited in f)(1)i..

When burning fuel oil, the OC emissions shall be determined by multiplying the annual fuel oil usage as determined in d)(4), by the emission factor of 0.2 lb OC/1000 gals cited in f)(1)i., and dividing by 2000 lbs/ton.

k. Emission Limitation:

5% visible emission opacity limit, as a 6-minute average except during periods of startup and shutdown

Applicable Compliance Method:

Compliance with the visible emission limitations is presumed based upon the use of natural gas or No. 2 fuel oil, fuels considered inherently clean. If required, visible emission evaluations shall be performed in accordance with OAC rule



Final Permit-to-Install and Operate

BASF Corporation

Permit Number: P0110546

Facility ID: 0819070134

Effective Date: 5/21/2014

3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

g) Miscellaneous Requirements

(a) None.



2. B010, MG-840

Operations, Property and/or Equipment Description:

17.5 mmBtu/hr diesel fired generator, MG-840

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04175 issued 11/12/2002	<p>The particulate emissions (PE) from emissions unit B010 shall not exceed 0.12 tons per year (TPY).</p> <p>The sulfur dioxide (SO₂) emissions from emissions unit B010 shall not exceed 0.05 pound per mmBtu (lb/mmBtu) and 0.10 TPY.</p> <p>The carbon monoxide (CO) emissions from emissions unit B010 shall not exceed 0.85 lb/mmBtu and 1.67 TPY. The organic compound (OC) emissions from emissions unit B010 shall not exceed 0.09 lb/mmBtu and 0.18 TPY.</p> <p>The visible emissions opacity shall not exceed 10% opacity, as a 6-minute average, except during periods of startup and shutdown.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-11(B)(5)(b) and 3745-17-07(A)(1).
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V) PTI 08-04175 issued 11/12/2002	The nitrogen oxide (NOx) emissions from this emissions unit shall not exceed 5.1 lb/mmBtu and 10.00 TPY, as a rolling 12-month summation. See c)(2).
c.	OAC rule 3745-17-11(B)(5)(b)	The PE emissions from emissions unit B010 shall not exceed 0.062 lb/mmBtu actual heat input.
d.	OAC rule 3745-17-07(A)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

- (1) The permittee shall burn only distillate fuel oil in this emissions unit. The sulfur content of the distillate oil shall not exceed 0.05 percent sulfur by weight.
- (2) The maximum distillate fuel oil usage in this emissions unit shall not exceed 28,600 gallons/year, as a rolling 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), the permittee's or oil supplier's analyses for sulfur content and heat content. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.
- (2) The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.



- (3) When a shipment of fuel oil is received with a sulfur content higher than 0.05 percent by weight, the permittee shall maintain monthly records of the calculated sulfur content based upon a volume-weighted average of the calculated sulfur content for all shipments of oil, for only those months when oil is combusted in this emissions unit.
 - (4) The permittee shall maintain monthly records of the following information:
 - a. The total amount of distillate fuel oil burned in this emissions unit, in gallons.
 - b. The rolling, 12-month summation of distillate fuel oil usage, in gallons.
 - c. The total calculated emission rate of nitrogen oxides, in tons.
 - d. The calculated emission rate of nitrogen oxides, in tons.
 - e. The rolling, 12-month summation of the nitrogen oxides emission rates, in tons.
 - (5) For each day during which the permittee burns a fuel other than distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- e) Reporting Requirements
- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
 - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
 - (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of:
 - a. the 0.05 percent sulfur content limitation of the fuel;
 - b. each day when a fuel other than distillate fuel oil was burned in this emissions unit;



- c. the rolling, 12-month distillate fuel oil usage limitation; and
- d. the rolling, 12-month NO_x emission limitation.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (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) The permittee shall submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

The PE emissions shall not exceed 0.062 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance shall be based upon the emission factor of 0.062 lb filterable particulate/mmBtu for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 3.4-2, 10/96. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

- b. Emission Limitation:

The PE emissions shall not exceed 0.12 TPY as defined by rule.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual distillate fuel oil usage (28,600 gallons/year) by the heat content of the fuel (137,000 Btu/gal) and the emission factor of 0.062 lb filterable particulate/mmBtu cited in f)(1)a., and dividing by 2000 lbs/ton.

Compliance shall be determined based upon record keeping requirements in d)(1) and d)(4) and determined by multiplying the annual distillate fuel oil usage



by the heat content of the fuel, multiplied by the emission factor of 0.062 lb particulate/mmBtu cited in f)(1)a., and dividing by 2000 lbs/ton.

c. Emission Limitation:

The SO₂ emissions shall not exceed 0.05 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation was derived from the equation $(1.01 \times 0.05\% S_1^*)$ for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 3.4-1, 10/96., with $S_1 = 0.05$. Compliance shall be based upon this for the use of fuel oil that complies with sulfur content limitation.

* S_1 is the percent of sulfur in the oil received during the month. For example, if the fuel oil is 1% sulfur, then $S = 1$.

If required, the permittee shall demonstrate compliance in accordance with Method 6, 40 CFR Part 60, Appendix A.

d. Emission Limitation:

The SO₂ emissions shall not exceed 0.10 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual distillate fuel oil usage (28,600 gallons/year) by the heat content of the fuel (137,000 Btu/gal) and the emission factor of 0.05 lb-SO₂/mmBtu oil cited in f)(1)c., and dividing by 2000 lbs/ton.

Compliance shall be determined based upon record keeping requirements in d)(1) and d)(4) and determined by multiplying the annual distillate fuel oil usage by the heat content of the fuel, multiplied by the emission factor of 0.05 lb-SO₂/mmBtu oil cited in f)(1)c., and dividing by 2000 lbs/ton.

e. Emission Limitation:

The CO emissions shall not exceed 0.85 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation is based upon the emission factor of 0.85 lb CO/mmBtu for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 3.4-1, 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.



f. Emission Limitation:

The CO emissions shall not exceed 1.67 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual distillate fuel oil usage (28,600 gallons/year) by the heat content of the fuel (137,000 Btu/gal) and the emission factor of 0.85 lb CO/mmBtu cited in f)(1)e., and dividing by 2000 lbs/ton.

Compliance shall be determined based upon record keeping requirements in d)(1) and d)(4) and determined by multiplying the annual distillate fuel oil usage by the heat content of the fuel, multiplied by the emission factor of 0.85 lb-CO/mmBtu oil cited in f)(1)e., and dividing by 2000 lbs/ton.

g. Emission Limitation:

The OC emissions shall not exceed 0.09 lb/mmBtu.

Applicable Compliance Method:

This emissions limitation is based upon the emission factor of 0.09 lb OC/mmBtu for diesel fuel engines given in AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 3.4-1, 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with Method 25 or 25A of 40 CFR, Part 60, Appendix A.

h. Emission Limitation:

The OC emissions shall not exceed 0.18 TPY.

Applicable Compliance Method:

This emissions limitation was developed by multiplying the maximum annual distillate fuel oil usage (28,600 gallons/year) by the heat content of the fuel (137,000 Btu/gal) and the emission factor of 0.09 lb OC/mmBtu cited in f)(1)g., and dividing by 2000 lbs/ton.

Compliance shall be determined based upon record keeping requirements in d)(1) and d)(4) and determined by multiplying the annual distillate fuel oil usage by the heat content of the fuel, multiplied by the emission factor of 0.09 lb OC/mmBtu cited in f)(1)g., and dividing by 2000 lbs/ton.

i. Emission Limitation:

The NOx emissions shall not exceed 5.1 lbs/mmBtu.



Applicable Compliance Method:

This emissions limitation is based upon the emission factor provided by the site specific emissions testing conducted on 01/30/2002.

If required, the permittee shall demonstrate compliance with this emission limitation through additional stack testing performed in accordance with Methods 1 through 4 and 7 or 7E of 40 CFR Part 60, Appendix A.

j. Emission Limitation:

The NO_x emissions shall not exceed 10.00 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

This emissions limitation developed by multiplying the maximum annual distillate fuel oil usage (28,600 gallons/year) by the heat content of the fuel (137,000 Btu/gal) and the emission factor 5.1 lbsNO_x/mmBtu cited in f)(1)i., and dividing by 2000 lbs/ton.

Compliance with the 10.00 TPY NO_x, as a rolling 12-month summation shall be determined through the record keeping requirements specified in d)(1) and d)(4), and determined by multiplying the distillate fuel oil usage by the heat content of the fuel, multiplied by the emission factor 5.1 lbsNO_x/mmBtu cited in f)(1)i.

k. Emission Limitation:

10% visible emission opacity limit, as a 6-minute average during startup and shutdown

Applicable Compliance Method:

Compliance with the visible emission limitations is presumed based upon the use of natural gas or distillate fuel oil, fuels which are considered inherently clean. If required, visible emission evaluations shall be performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

g) Miscellaneous Requirements

(1) None.



3. P021, Water Stripping

Operations, Property and/or Equipment Description:

water stripping column controlled by thermal oxidizer I

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-21-07(M)(1) and 3745-21-07(M)(2)	The organic compound (OC) emissions shall be reduced by an overall control efficiency of at least 85%, by weight. If reduction is achieved by incineration, 90% or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emission rate from this emissions unit shall not exceed 0.96 tons/year, as a rolling 12-month summation. See b)(2)c. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations.</p> <p>See Sections B.3. through B.5. of Facility Wide Terms and Conditions.</p>

(2) Additional Terms and Conditions

a. A thermal oxidizer is employed to comply with the requirement of OAC rule 3475-21-07(M)(1).

b. The permittee shall control all of the VOC emissions from this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for OC.

[The resin I thermal oxidizer is a common OC control device for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P021, P028, P029, P031, T001 and the specific tanks identified in emissions units T029. Permitting requirements for some of these emissions units specify the thermal oxidizer shall achieve a 98% reduction in OC emissions.]

c. The 0.96 TPY VOC was established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)



- (2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- (3) The permittee shall collect and record the following information for each day for the control equipment:
 - a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
 - b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.



- (3) The permittee shall submit quarterly deviation (excursion) reports identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (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) The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- (5) The permittee shall submit annual reports that specify the VOC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emissions shall not exceed 0.96 TPY, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based on multiplying the controlled hourly PTE of 0.22 lbs VOC/hr by 8760 hours per year and dividing by 2,000 lbs/ton.

b. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling 12-month summation.



Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section B.4 of Facility Wide Terms and Conditions.

c. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section B.4 of Facility Wide Terms and Conditions.

d. Emission Limitation:

98% destruction efficiency, by weight, for OC

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin I thermal oxidizer shall be conducted within 12 months after the issuance of this permit, with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight. for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol



approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.
- e. Not later than 60 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).

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**

- a) None.



4. P029, Buflovak Stripping Operation

Operations, Property and/or Equipment Description:

Buflovak stripping operation controlled by thermal oxidizer I

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. None.

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

a. None.

(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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emissions rate from this emissions unit shall not exceed 4.0 lbs per hour (lbs/hr). See b)(2)b. and b)(2)c. The requirements of this rule shall also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-07(M)(1) and 3745-21-07(M)(2).
b.	OAC rules 3745-21-07(M)(1) and 3745-21-07(M)(2)	The organic compound (OC) emissions shall be reduced by an overall control efficiency of at least 85%, by weight. If reduction is achieved by incineration, 90% or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide. See b)(2)a. and b)(2)b.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	<p>The volatile organic compound (VOC) emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation. See b)(2)f.</p> <p>The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations.</p> <p>See Sections B.3. through B.5. of Facility Wide Terms and Conditions.</p>

2. Additional Terms and Conditions

- a. A thermal oxidizer is employed to comply with the requirement of OAC rule 3475-21-07(M)(1).
- b. The permittee shall control all of the VOC emissions from the process loading, heating, reaction, blending, process transfers, and vessel cleaning operations that are associated with this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for VOC. [The resin I thermal oxidizer is a common VOC control device for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P021, P028, P029, P031, T001 and the specific tanks identified in emissions units T029.]
- c. The VOC emission limitations established pursuant to OAC rule 3745-31-05(A)(3) include all VOC emissions from the following operations that are associated with this emissions unit:
 - i. process loading;
 - ii. initiator tank loading;
 - iii. heating;
 - iv. reaction;
 - v. blending;



- vi. process transfers;
- vii. filter changes;
- viii. vessel cleaning; and,
- ix. final product loading.

- d. The 4.00 lbs/hr VOC limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- e. Included in the allowable are 0.15 TPY VOC from the thermal oxidizer I fuel combustion.

c) **Operational Restrictions**

- (1) The maximum annual volatile organic compound input to emission units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 shall not exceed 42.76 tons per year as a rolling, 12-month summation, based upon the monthly volatile organic compound input figures from a combination of materials. The annual volatile organic compound input in this term is the summation of all raw material VOC components which equate to the annual VOC emission rate in b)(1) based upon the premise that less than 100% of all the VOCs contained in the raw material components are emitted. Therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual organic compound input of this term.
- (2) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)

The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated



and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

The permittee shall collect and record the following information each month for this emissions unit.

- a. The company identification of each material manufactured (recipe).
- b. The amount of each material manufactured, in gallons.
- c. The VOC emissions from each material manufactured, in pounds per gallon.
- d. The total VOC emission rate for all materials manufactured in the processes associated with this emissions unit.
- e. The total number of clean-up batches.
- f. The VOC emissions of each clean-up batch, in pound per batch.
- g. The total VOC emission rate for all clean-up batches.
- h. The total controlled VOC emissions.

The permittee shall collect and record each month the rolling 12-month VOC emissions for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined, in tons (this is calculated by adding the rolling monthly VOC emission rates for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029).



e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. An identification of each month during which the rolling, 12-month VOC emission rate from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined exceeded 42.76 tons per year, and the actual rolling, 12-month emissions rate for each such month.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.



The permittee shall submit annual reports that specify the VOC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emissions rate from emissions unit P029 shall not exceed 4.00 lbs/hr.

Applicable Compliance Method:

Multiply the hourly production rate by the emission factor for the worst case resin manufactured and multiply by 98% control efficiency, then add in the uncontrolled emission rate from the initiator tank.

b. Emission Limitation:

The VOC emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in d)(4) which uses the facility specific EMAX software or other software approved by RAPCA.

c. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section B.4 of Facility Wide Terms and Conditions.

d. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section B.4 of Facility Wide Terms and Conditions.

e. Emission Limitation:

98% destruction efficiency, by weight, for VOC for all emissions controlled by the thermal oxidizer I.

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin I thermal oxidizer shall be conducted within 12 months after the issuance of this permit, with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.



- e. No later than 60 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).

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.



5. P031, Solvent Recovery Fractionator

Operations, Property and/or Equipment Description:

solvent recovery fractionator controlled by thermal oxidizer I

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-21-07(M)(1) and 3745-21-07(M)(2)	The organic compound (OC) emissions shall be reduced by an overall control efficiency of at least 85%, by weight. If reduction is achieved by incineration, 90% or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emission rates from this emissions unit shall not exceed 1.67 tons per year, as a rolling 12-month summation. See b)(2)c. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations. See Sections B.3. through B.5. of Facility Wide Terms and Conditions.

2. Additional Terms and Conditions

- a. A thermal oxidizer is employed to comply with the requirement of OAC rule 3475-21-07(M)(1).
- b. The permittee shall control all of the VOC emissions from this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for OC.

 [The resin I thermal oxidizer is a common OC control device for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P021, P028, P029, P031, T001 and the specific tanks identified in emissions units T029. Permitting requirements for some of these emissions units specify the thermal oxidizer shall achieve a 98% reduction in OC emissions.]
- c. The 1.67 TPY VOC was established to reflect potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c) Operational Restrictions

- (1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)

The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit.



The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees



Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

The permittee shall submit annual reports that specify the OC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emission rate for emissions unit P031 shall not exceed 1.67 tons per year per, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based on multiplying the daily controlled PTE of 9.13 lbs VOC per day by 365 days per year and dividing by 2,000 lbs per ton.

b. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section B.4. of Facility Wide Terms and Conditions.



c. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section B.4. of Facility Wide Terms and Conditions.

d. Emission Limitation:

98% destruction efficiency, by weight, for OC

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 12 months after issuance of this permit, with following tests to be conducted on a 60 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.



- d. 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.

- e. No later than 60 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).

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**

- a) None.



6. T001, Tk238A

Operations, Property and/or Equipment Description:
 dirty water tank controlled by thermal oxidizer I

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.58 ton per year, as a rolling 12-month summation. See b)(2)b. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations. See Sections B.3. through B.5. of Facility Wide Terms and Conditions.



2. Additional Terms and Conditions

- a. The permittee shall control all of the OC emissions from this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for OC. [The resin I thermal oxidizer is a common OC control device for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P021, P027, P028, P029, P030, P031, T001 and the specific tanks identified in emissions units T029.]
- b. The 0.58 TPY VOC was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with this limit.

c) Operational Restrictions

- (1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)

The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most



recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).



The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

The permittee shall submit annual reports that specify the OC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emission rates for emissions unit T001 shall not exceed 0.58 ton per year, as a rolling 12 month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based on the hourly controlled potential to emit of 0.13 lbs per hour multiplied by 8760 hrs per year and divided by 2,000 lbs per ton.

b. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

c. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.



d. Emission Limitation:

98% destruction efficiency, by weight, for OC

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin I thermal oxidizer shall be conducted within 12 months after the issuance of this permit, with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.
- e. No later than 60 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).



Final Permit-to-Install and Operate

BASF Corporation

Permit Number: P0110546

Facility ID: 0819070134

Effective Date: 5/21/2014

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.



7. T029, Storage Tanks

Operations, Property and/or Equipment Description:

Tank Farm - material transfer and organic liquid storage tanks (115 tanks) controlled by thermal oxidizers I and II

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 40 CFR Part 60 Subpart Kb. See b)(2)a. and b)(2)b.
b.	40 CFR Part 60 Subpart Kb	See d)(4) and d)(5).
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emission rates from emissions units T029 and T030 combined shall not exceed 16.11 tons per year, as a rolling 12-month summation. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs,



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		as rolling 12 month summations. See Sections B.3. through B.5. of Facility Wide Terms and Conditions.

2. Additional Terms and Conditions

- a. There are a total of 115 storage tanks grouped as emissions unit T029. The following identifies the tanks, the size of each, and their location.

Area 100:

109 - 28,000 gallons

104, 105 - 20,000 gallons

102, 103, 107 - 15,000 gallons

101 - 10,000 gallons

106 - 8,000 gallons

Tanks 101 and 106 are connected to thermal oxidizer I; tank 107 vents through a condenser; all other tanks in area 100, are equipped with conservation vents.

Area 110:

122, 135, 136 - 30,000 gallons

115 thru 121, 125 thru 131, 137 - 20,000 gallons

111 thru 114, 123, 124 - 12,000 gallons

All tanks in area 110 are connected to Thermal Oxidizer II.

Area 140:

141 thru 147, 151 thru 157, 161 thru 167, 171 thru 177 - 20,000 gallons

All tanks in area 140 are equipped with conservation vents.

Area 400:

424, 445, 464 - 20,000 gallons

401 thru 406, 421 thru 423, 425, 426, 441 thru 444, 446, 461 thru 463, 465 thru 467 - 12,000 gallons

All tanks in area 400 are equipped with conservation vents.



Area 500:

500 thru 506, 520 thru 526, 540 thru 545, 565, 566 - 20,000 gallons

546, 564 - 15,000 gallons

Tanks 500 thru 506 are connected to Thermal Oxidizer I. All other tanks in area 500 are equipped with conservation vents.

Area 700:

702, 703 - 30,000 gallons

700, 701, 704, 707 - 20,000 gallons

Tanks 700 thru 704 are connected to Thermal Oxidizer II. Tank 707 is vented to a carbon canister.

- b. For those tanks identified in b)(2)a. above as controlled by a thermal oxidizer (thermal oxidizer I or thermal oxidizer II), the permittee shall operate the thermal oxidizer such that it meets a minimum destruction efficiency of 98%, for OC.

[The resin I thermal oxidizer is a common OC control device for emissions units P001, P008 through P010, P012 through P016, P021, P027, P028, P029, P031, T001 and the specific tanks identified in emissions unit T029. Permitting regulations applicable to some of these emissions units specify the thermal oxidizer shall achieve a 98% reduction in OC emissions.]

[The resin II thermal oxidizer is a common OC control device for emissions units P022 through P025, T030 and the specified tanks identified in emissions unit T029. Permitting regulations applicable to some of these emissions units specify the thermal oxidizer shall achieve a 98% reduction in OC emissions.]

- c. The volatile organic compound input to emissions units T029 and T030 combined shall not result in emissions which exceed 16.11 tons per year VOC, based upon a rolling, 12-month summation of VOC emissions from a combination of materials. The annual volatile organic compound input in this term is the summation of all material VOC components which equates to the annual VOC emissions rate in term b)(1) based upon the premise that less than 100% of all the VOCs contained in the material components are emitted. Therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual volatile organic compound input of this term.



c) Operational Restrictions

- (1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

For those storage tanks vented to either the resin I thermal oxidizer or resin II thermal oxidizer, all of the emissions from the tanks shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)

(The most recent compliance test conducted on 05/03/2012 for resin II thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1502 degrees F.)

The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation.



Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

The permittee shall maintain readily accessible records showing the dimensions of each storage vessel and an analysis showing the storage capacity of each storage vessel.

The permittee shall maintain the following records for those tanks with a storage capacity greater than 19,812 gallons and store liquids with maximum true vapor pressures exceeding 2.18 psia:

- a. The volatile organic liquids stored.
- b. The period of storage of the volatile organic liquids.
- c. The maximum true vapor pressure of the volatile organic liquids during that period.

The permittee shall record and maintain the following information for each storage vessel on a monthly basis:

- a. The identification of the material being stored.
- b. Whether the tank is equipped with a submerged fill pipe.
- c. The throughput of the material, in gallons.
- d. The true vapor pressure of the material, in psia.
- e. The calculated volatile organic compound emissions, in pounds.
- f. The rolling 12-month VOC emissions, in tons.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.



- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. An identification of each month during which the rolling, 12-month emission from emissions units T029 and T030 combined exceeded 16.11 tons per year, and the actual rolling, 12-month emissions rate for each such month.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

The permittee shall submit annual reports that specify the VOC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC combined emission rates from emissions units T029 and T030 combined shall not exceed 16.11 tons per year, as a rolling 12-month summation.



Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirements specified in d)(6).

b. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

c. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

d. Emission Limitation:

98% destruction efficiency, by weight, for OC

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin I thermal oxidizer shall be conducted within 12 months after the issuance of this permit, with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.

The emission testing for Resin II thermal oxidizer shall be conducted no later than the first half of 2017 with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.



- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.

A demonstration of the VOC destruction efficiency shall be conducted for both resin I thermal oxidizer and resin II thermal oxidizer.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.
- e. No later than 60 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).

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.



Final Permit-to-Install and Operate

BASF Corporation

Permit Number: P0110546

Facility ID: 0819070134

Effective Date: 5/21/2014

g) Miscellaneous Requirements

(1) None.



8. T030, T-110

Operations, Property and/or Equipment Description:

30,000 gallon fuel oil storage tank with submerged fill controlled by thermal oxidizer II

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-09(L) and 40 CFR Part 60 Subpart Kb.
b.	40 CFR Part 60 Subpart Kb	See d)(1).
c.	OAC rule 3745-21-09(L)	Exempt, pursuant to OAC rule 3745-21-09(L)(2). See b)(2)a.
d.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emissions rates from emissions units T029 and T030 combined shall not exceed 16.11 tons per year, as a rolling 12-month summation. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>tons/year for any combination of HAPs, as rolling 12 month summations.</p> <p>See Sections B.3. through B.5. of Facility Wide Terms and Conditions.</p>

2. Additional Terms and Conditions

- a. The tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof tank with a capacity of less than forty thousand gallons.
- b. The permittee shall control all of the OC emissions from this emissions unit by the use of a thermal oxidizer. The thermal oxidizer (resin II) shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for OC.

[The resin II thermal oxidizer is a common OC control device for emissions units P022, P023, P024, P025, T029 and T030. Permitting requirements for some of these emissions units specify the thermal oxidizer shall achieve a 98% reduction in OC emissions.]

- c. The annual volatile organic compound input to emissions units T029 and T030 combined shall not result in emissions which exceed 16.11 tons per year VOC, based upon a rolling, 12-month summation of VOC emissions from a combination of materials. The annual volatile organic compound input in this term is the summation of all material VOC components which equates to the annual VOC emissions rate in term b)(1) based upon the premise that less than 100% of all the VOCs contained in the material components are emitted. Therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual volatile organic compound input of this term.

c) Operational Restrictions

- (1) The tank shall be loaded by means of a submerged fill pipe, defined as any fill pipe with the discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank or when loaded from the side, any fill pipe with the discharge opening entirely submerged when the liquid level is eighteen inches above the bottom of the tank, OAC rule 3745-21-01(C)(6).

All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.



In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 05/03/2012 for resin II thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1502 degrees F.)

The permittee shall record and maintain the following information for each storage vessel on a monthly basis:

- a. The identification of the material being stored.
- b. Whether the tank is equipped with a submerged fill pipe.
- c. The throughput of the material, in pounds.
- d. The true vapor pressure of the material, in psia.
- e. The calculated volatile organic compound emissions, in pounds.
- f. The rolling 12-month VOC emissions, in tons.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.



The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. An identification of each month during which the rolling, 12-month VOC emission rate from T029 and T030 combined exceeded 16.11 tons, and the actual rolling, 12-month emissions rate for each such month.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

The permittee shall submit annual reports that specify the OC emissions, and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

The VOC emission rates from emissions units T029 and T030 combined shall not exceed 16.11 tons per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable OC emission limitation above shall be based upon the monthly record keeping requirement specified in d)(3).



b. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

c. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

d. Emission Limitation:

98% destruction efficiency, by weight, for OC

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin II thermal oxidizer shall be conducted no later than the first half of 2017 with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.



The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.
- e. No later than 60 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).

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.



9. Emissions Unit Group -mill systems: P032, P033, P034

EU ID	Operations, Property and/or Equipment Description
P032	Mill System 301 including hopper and premix tank controlled with a baghouse, mill system, mill feed tank, and drum and tote filling
P033	Mill System 302 including hopper and premix tank controlled with a baghouse, mill system, mill feed tank, and drum and tote filling
P034	Mill System 303 including hopper and premix tank controlled with a baghouse, mill system, mill feed tank, and drum and tote filling

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04669 issued 4/12/2005	The organic compound (OC) emissions from each emissions unit shall not exceed 3.3 pounds per hour (lbs/hr) and 1.1 tons per year (TPY). The combined particulate emissions (PE) from the baghouse serving emissions units P032, P033, and P034 shall not exceed 0.43 lb/hr and 1.9 TPY. See b)(2)b. Visible PE from the baghouse serving emissions units P032, P033, and P034 shall not exceed 5 percent opacity, as a



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		6-minute average. The requirements of this rule shall also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B).
b.	OAC rule 3745-17-07(A)	The visible emissions limit specified by this rule is less stringent than that specified by OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)	The emissions limit specified by this rule is less stringent than that specified by OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 63 Subpart HHHHH	See B.2. of Facility Wide Terms and Conditions.

2. Additional Terms and Conditions

- a. The hourly PE and hourly and daily OC emissions limitations were established for PTIO purposes to reflect the potential to emit for each of these emissions units. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- b. The baghouse control is common to emissions units P032, P033 and P034.

c) Operational Restrictions

- (1) All of the emissions from these emissions units shall be vented to and controlled by a baghouse that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions units are in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each month for each emissions unit:
 - a. The company identification for each product manufactured.
 - b. The quantity of product produced, in million (MM) pounds per month.
 - c. The total OC emission rate for all products produced, in tons, i.e., (b) times 153 lb-OC/MM pounds product*, and divided by 2,000 lbs/ton.

* The emission factor was developed by the permittee using the worst-case product.

The permittee shall perform weekly checks, when the emissions units are 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 abnormal 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.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA.

The PER must be submitted 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.



The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term d)(2) above:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
- b. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The OC emissions from each emissions unit shall not exceed 3.3 lbs/hr.

Applicable Compliance Method:

This emissions limitation is based upon the worst case product emission factor of 3.3 lbs VOC/batch and the assumption that all VOC emissions will occur during one hour of this 18-hour batch.

b. Emission Limitation:

The OC emissions from each emissions unit shall not exceed 1.1 TPY OC

Applicable Compliance Method:

Compliance shall be determined by summing the monthly emissions, in tons as specified in d)(1), for the calendar year and dividing this sum by 2000 lbs/ton.

c. Emission Limitation:

The combined PE from the baghouse serving emissions units P032, P033, and P034 shall not exceed 0.43 lb/hr.

Applicable Compliance Method:

This emissions limitation is based on multiplying the PE grain loading from the baghouse (0.01 gr/dscf) by the stack air flow rate (5,000 acfm), by 60 minutes/hour and dividing by 7,000 gr/lb.

If required, compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with OAC rule 3745-17-03(B)(10) using Methods 1 - 5 of 40 CFR Part 60, Appendix A.



d. Emission Limitation:

The combined PE from the baghouse serving emissions units P032, P033, and P034 shall not exceed 1.9 TPY PE.

Applicable Compliance Method:

Compliance with the annual PE limitation above shall be determined by multiplying the maximum hourly PE rate (0.43 lb/hr) by the maximum operating hours (8,760 hours/yr) and dividing by 2,000 lbs/ton.

e. Emission Limitation:

Visible PE from the baghouse serving emissions units P032, P033, and P034 shall not exceed 5 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.



10. Emissions Unit Group -reactors controlled by TO-II: P022, P023, P024, P025

EU ID	Operations, Property and/or Equipment Description
P022	reactor train 1 controlled by thermal oxidizer II
P023	reactor train 2 controlled by thermal oxidizer II
P024	reactor train 3 controlled by thermal oxidizer II
P025	reactor train 4 controlled by thermal oxidizer II

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emissions rate from each emissions unit shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-07(M)(1) and 3745-21-07(M)(2). See b)(2)b. and b)(2)d.
b.	OAC rules 3745-21-07(M)(1) and 3745-21-07(M)(2)	The organic compound (OC) emissions shall be reduced by an overall control efficiency of at least 85%, by weight. If reduction is achieved by incineration,



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>90% or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.</p> <p>See b)(2)a. and b)(2)b.</p>
c.	<p>OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006</p>	<p>The volatile organic compound (VOC) emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation.</p> <p>See b)(2)e. and c)(1)</p> <p>The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations.</p> <p>See Sections B.3. through B.5. of Facility Wide Terms and Conditions.</p>

2. Additional Terms and Conditions

- a. A thermal oxidizer is employed to comply with the requirement of OAC rule 3475-21-07(M)(1).
- b. The permittee shall control all of the VOC emissions from the process loading, heating, reaction, blending, process transfers, and vessel cleaning operations that are associated with this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for VOC.

[The resin II thermal oxidizer is a common VOC control device for emissions units P022, P023, P024, P025, and the specific tanks identified in emissions units T029.]
- c. The VOC emission limitations established pursuant to OAC rule 3745-31-05(A)(3) include all VOC emissions from the following operations that are associated with this emissions unit:
 - i. process loading;
 - ii. initiator tank loading;



- iii. heating;
- iv. reaction;
- v. blending;
- vi. process transfers;
- vii. filter changes;
- viii. vessel cleaning; and,
- ix. final product loading.

- d. The 4.00 lbs/hr VOC limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- e. Included in the allowable are 0.24 TPY VOC from the thermal oxidizer II fuel combustion.

c) **Operational Restrictions**

- (1) The maximum annual volatile organic compound input to emission units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 shall not exceed 42.76 tons per year as a rolling, 12-month summation, based upon the monthly volatile organic compound input figures from a combination of materials. The annual volatile organic compound input in this term is the summation of all raw material VOC components which equate to the annual VOC emission rate in b)(1) based upon the premise that less than 100% of all the VOCs contained in the raw material components are emitted. Therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual organic compound input of this term.
- (2) All of the emissions from this emissions unit shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 05/03/2012 for resin II thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1502 degrees F.)



(2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

The permittee shall collect and record the following information each month for this

- a. The company identification of each material manufactured (recipe).
- b. The amount of each material manufactured, in gallons.
- c. The VOC emissions from each material manufactured, in pounds per gallon.
- d. The total VOC emission rate for all materials manufactured in the processes associated with this emissions unit.
- e. The total number of clean-up batches.
- f. The VOC emissions of each clean-up batch, in pound per batch.
- g. The total VOC emission rate for all clean-up batches.
- h. The total controlled VOC emissions.

The permittee shall collect and record each month the rolling 12-month VOC emissions for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined, in tons (this is calculated by adding the rolling monthly VOC emission rates for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029).



e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. An identification of each month during which the rolling, 12-month VOC emissions rate from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 exceeded 42.76 tons, and the actual rolling, 12-month emissions rate for each such month.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.



The permittee shall submit annual reports that specify the actual total VOC from this emissions unit and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emissions rate from each emissions unit shall not exceed 4.00 lbs/hr.

Applicable Compliance Method:

Multiply the maximum hourly production rate by the emission factor for the worst case resin manufactured and multiply by 98% control efficiency, then add in the uncontrolled emission rate from the initiator tank.

b. Emission Limitation:

The VOC emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in d)(3) and (4) which uses the facility specific EMAX software or other software approved by RAPCA.

c. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in B.4 of Facility Wide Terms and Conditions.

d. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for any combination of HAPs, as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in B.4 of Facility Wide Terms and Conditions.

e. Emission Limitation:

98% destruction efficiency, by weight, for all VOC emissions controlled by the thermal oxidizer II.

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin II thermal oxidizer shall be conducted no later than the first half of 2017 with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.



- e. No later than 60 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).

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.



11. Emissions Unit Group -reactors controlled by TO-I: P001, P008, P009, P010, P012, P013, P014, P015, P016, P028

EU ID	Operations, Property and/or Equipment Description
P001	reactor train A controlled by thermal oxidizer I
P008	reactor train D controlled by thermal oxidizer I
P009	reactor train B controlled by thermal oxidizer I
P010	reactor train C controlled by thermal oxidizer I
P012	reactor train J controlled by thermal oxidizer I
P013	reactor train F controlled by thermal oxidizer I
P014	reactor train G controlled by thermal oxidizer I
P015	reactor train H controlled by thermal oxidizer I
P016	reactor train I controlled by thermal oxidizer I
P028	OEM clearcoat train controlled by thermal oxidizer I

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The maximum volatile organic compound (VOC) emissions rate from each emissions unit shall not exceed 4.0 lbs per hour (lbs/hr). See b)(2)b and b)(2)d. The requirements of this rule shall also include compliance with the requirements



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		of OAC rules 3745-31-05(D), 3745-21-07(M)(1) and 3745-21-07(M)(2).
b.	OAC rules 3745-21-07(M)(1) and 3745-21-07(M)(2)	<p>The organic compound (OC) emissions shall be reduced by an overall control efficiency of at least 85%, by weight. If reduction achieved by incineration, 90% or more of the carbon in the organic material being incinerated shall be oxidized to carbon dioxide.</p> <p>See b)(2)a. and b)(2)b.</p>
c.	<p>OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006</p>	<p>The volatile organic compound (VOC) emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation.</p> <p>See b)(2)e. and c)(1).</p> <p>The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations.</p> <p>See Sections B.3. through B.5. of Facility Wide Terms and Conditions.</p>

2. Additional Terms and Conditions

- a. A thermal oxidizer is employed to comply with the requirement of OAC rule 3475-21-07(M)(1).
- b. The permittee shall control all of the VOC emissions from the process loading, heating, reaction, blending, process transfers, and vessel cleaning operations that are associated with this emissions unit by the use of a thermal oxidizer. The thermal oxidizer shall be operated such that it meets a minimum destruction efficiency of 98%, by weight, for VOC.

The resin I thermal oxidizer is a common VOC control device for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P021, P028, P029, P031, T001, and the specific tanks identified in emissions units T029.]



- c. The VOC emission limitations established pursuant to OAC rule 3745-31-05(A)(3) include all VOC emissions from the following operations that are associated with this emissions unit:
 - i. process loading;
 - ii. initiator tank loading;
 - iii. heating;
 - iv. reaction;
 - v. blending;
 - vi. process transfers;
 - vii. filter changes;
 - viii. vessel cleaning; and,
 - ix. final product loading.
- d. The 4.00 lbs/hr VOC limitation was established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- e. Included in the allowable are 0.15 TPY VOC from the thermal oxidizer I fuel combustion.

c) **Operational Restrictions**

- (1) The annual volatile organic compound input to emission units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 shall not exceed 42.76 tons per year as a rolling, 12-month summation, based upon the monthly volatile organic compound input figures from a combination of materials. The annual volatile organic compound input in this term is the summation of all raw material VOC components which equate to the annual VOC emission rate in term A.1 based upon the premise that less than 100% of all the VOCs contained in the raw material components are emitted. Therefore all the record keeping and reporting requirements of this permit for the VOC emissions will be sufficient to verify the annual organic compound input of this term.

All of the emissions from these emissions units shall be vented to a thermal oxidizer system that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer system, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit



below the average temperature measured during the most recent compliance evaluation that demonstrates the thermal oxidizer system has a minimum overall control efficiency of 98%, on a total weight-basis.

(The most recent compliance test conducted on 4/6/2010 for resin I thermal oxidizer demonstrated an average of 99.9% destruction efficiency at an average combustion temperature of 1498 degrees F.)

The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the control equipment:

- a. A log of the downtime* for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.
- b. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

* The control device downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the thermal oxidizer is not in operation. Monitoring equipment downtime is defined as any time when the emissions unit is in operation, employing organic compounds, and the temperature monitoring equipment is not functioning.

The permittee shall collect and record the following information each month for this emissions unit.

- a. The company identification of each material manufactured (recipe).
- b. The amount of each material manufactured, in gallons.
- c. The total VOC emission rate for all materials manufactured in the processes associated with this emissions unit.
- d. The total number of clean-up batches.
- e. The VOC emissions of each clean-up batch, in pound per batch.
- f. The total VOC emission rate for all clean-up batches.



- g. The total controlled VOC emissions.

The permittee shall collect and record each month the rolling 12-month VOC emissions for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined, in tons (this is calculated by adding the rolling monthly VOC emission rates for emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029).

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.

The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. Identification of all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. An identification of each month during which the rolling, 12-month VOC emissions rate from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 exceeded 42.76 tons, and the actual rolling, 12-month emissions rate for each such month.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April



(covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall submit quarterly summaries which include a log of the downtime for the capture (collection) system, control device and monitoring equipment when the associated emissions unit was in operation.

The permittee shall submit annual reports that specify the actual total VOC from this emissions unit and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) **Testing Requirements**

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The VOC emissions rate from each emissions unit shall not exceed 4.00 lbs/hr.

Applicable Compliance Method:

Multiply the maximum hourly production rate by the emission factor for the worst case resin manufactured and multiply by 98% control efficiency, then add in the uncontrolled emission rate from the initiator tank.

b. Emission Limitation:

The VOC emissions from emissions units P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 combined shall not exceed 42.76 tons per year, as a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in d)(3) and (4) which uses the facility specific EMACT software or other software approved by RAPCA.

c. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.



Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in in B.4. of Facility Wide Terms and Conditions.

d. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for all any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in in B.4. of Facility Wide Terms and Conditions.

e. Emission Limitation:

98% destruction efficiency, by weight, for all VOC emissions controlled by the thermal oxidizer I.

Applicable Compliance Method:

Compliance with the destruction efficiency requirement above shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g., the mass balance protocol approved on 10/25/95).

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing for Resin I thermal oxidizer shall be conducted within 12 months after the issuance of this permit, with subsequent emission testing to be conducted on 60 month plus or minus 3 month schedule.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC, and the VOC destruction efficiency of 98%, by weight, for the thermal oxidizer.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25A of 40 CFR Part 60, Appendix A. The test methods that must be employed to demonstrate compliance with the control efficiency are specified below. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by the Ohio EPA (e.g., the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be



based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. 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.
- e. No later than 60 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).

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.



12. Emissions Unit Group -spray booths: P027, P030

EU ID	Operations, Property and/or Equipment Description
P027	OEM clearcoat spray booth 1
P030	OEM clearcoat spray booth 2

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. None.

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

a. None.

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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 08-04244 issued 12/7/2006	The requirements of this rule shall also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-21-09(U)(2)(e)(iii), 3745-17-11(B), and 3745-17-07(A).
b.	OAC rule 3745-21-09(U)(2)(e)(iii)	VOC emissions exemption based on maximum daily coating usage not exceeding 10 gallons of coating in any one day.
c.	OAC rule 3745-17-11(B)	The particulate emission (PE) from this emission unit shall not exceed 0.551 pound per hour (lb/hr).
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63) PTI 08-04244 issued 12/7/2006	The volatile organic compound (VOC) emissions rate from emissions units P027 and P030 combined shall not exceed 12.03 tons per year, including cleanup, based upon a rolling, 365-day summation of the daily emissions. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling 12 month summations. See Sections B.3. through B.5. of Facility Wide Terms and Conditions.
f.	OAC rule 3745-17-11(C)	See c)(2), c)(3), and d)(2) through d)(6).

2. Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The rolling 12-month VOC emissions limitation is based upon and equivalent to the 12-month summation of the coating usage. The annual volatile organic material usage from each individual emissions unit P027 and P030, and the combined annual VOC material usage from P027 and P030 shall not exceed 12.03 tons per year, based upon a rolling, 365-day summation of the daily volatile organic material usage from coating and cleanup materials.

The permittee shall install, operate, and maintain a dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for each emissions unit:



- a. The company identification of each coating employed.
- b. The VOC content of each coating employed, in pounds per gallon, as applied.
- c. The VOC content of each cleanup material, in pounds per gallon.
- d. The volume, in gallons, of each coating employed.
- e. The total volume, in gallons, of all the coatings employed (summation of d. for all coatings).
- f. The volume, in gallons, of each cleanup material employed.
- g. The VOC emissions from all the coatings employed [summation of (b. x d.) for all coatings], in tons.
- h. The VOC emissions for all the cleanup material employed [summation of (c. x f.) for all cleanup material], in tons.
- i. The total VOC emissions from all coatings and cleanup materials (g.+h.).
- j. The rolling, 365-day summation of the daily volatile organic emissions from coating and cleanup materials for P027 and P030, combined (summation of the values from i. for each emissions unit).

The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

- a. the date of the inspection;
- b. a description of each/any problem identified and the date it was corrected;



- c. a description of any maintenance and repairs performed; and
- d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit was in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify each day during which the rolling, 365-day VOC usage and emissions exceeded the 12.03 tons per year rolling 365-day emission limitation, and the actual rolling, 365-day VOC emissions for each such day.

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.

The quarterly reports shall be submitted electronically through OEPA Air Services each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-



first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the appropriate district office or local air agency).

The permittee shall notify the Director (Regional Air Pollution Control Agency) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limit of 10 gallons per day. The notification shall include a copy of such record and shall be sent to RAPCA within 45 days after the exceedance occurs.

The permittee shall submit annual reports that specify the actual total VOC from this emissions unit and the individual and combined HAP emissions from the facility for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including the specific emission data from this facility in the Annual Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

The maximum daily coating usage shall not exceed 10 gallons of coating in any one day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.

b. Emission Limitation:

The VOC emissions rate from each individual emissions unit shall not exceed 12.03 tons per year, including cleanup, based upon a rolling, 365-day summation of the daily emissions.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.

c. Emission Limitation:

The VOC emissions rate from emissions units P027 and P030 combined shall not exceed 12.03 tons per year, including cleanup, based upon a rolling, 365-day summation of the daily emissions



Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in d)(1) of this permit.

d. Emission Limitation:

The emissions of HAPs shall not exceed 9.9 tons for any single HAP, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section B.4. of Facility Wide Terms and Conditions.

e. Emission Limitation:

The emissions of HAPs shall not exceed 24.9 tons for any combination of HAPs, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in B.4. of Facility Wide Terms and Conditions.

f. Emission Limitation:

The PE shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

To determine the actual worst case emissions rate for particulate, the following equation may be used:

E = particulate matter emission rate (lbs/hr)

$$E = U \times (1-TE) \times (1-CE)$$

U = Maximum coating solids usage rate, in pound per hour

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the control equipment

If required, compliance shall be determined in accordance with OAC rule 3745-17-03(B)(10).



g. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a six minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

Formulation data or USEPA Method 24 shall be employed to determine the VOC contents for all coatings and cleanup materials.

g) Miscellaneous Requirements

(1) None.