State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

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

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
DARKE COUNTY

Application No: 08-04244
Fac ID: 0819070134
DATE: 12/7/2006

BASF Corp
Michael Murphy
1175 Martin St
Greenville, OH 45331-0000

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

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

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

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

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **RAPCA**

OhioEPA

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 12/7/2006**
Terms and Conditions	**Effective Date: 12/7/2006**

FINAL PERMIT TO INSTALL 08-04244

Application Number:	08-04244
Facility ID:	0819070134
Permit Fee:	**$2200**
Name of Facility:	BASF Corp
Person to Contact:	Michael Murphy
Address:	1175 Martin St Greenville, OH 45331-0000

Location of proposed air contaminant source(s) [emissions unit(s)]:
1175 Martin St
Greenville, **Ohio**

Description of proposed emissions unit(s):
Administrative modification to include synthetic minor limitations to avoid the MACT and get out of title V.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
VOC	74.11

Emissions Unit ID: **P001**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P001) - Reactor Train A/ TO1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P001 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P001 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum volatile organic compound (VOC) emissions rate from emissions unit P001 shall not exceed 4.00 lbs per hour (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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section

C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-370, issued June 19, 1981, modified October 9, 1991. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and

HAPs.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P008) - Reactor Train D/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P008 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P008 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.

OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product

loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(G)(2) and (6).

Emissions Unit ID: **P008**

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76
1-8	42.76

1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P008 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

d. Emission Limitation-
24.9 tons for all HAPs combined on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

Emissions Unit ID: **P008**

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-370, issued June 19, 1981, modified October 9, 1991. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P009) - Reactor Train B/ TO1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P009 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P009 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.

OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product

loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51

1-5	35.64
1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

   i. the total uncontrolled VOC emissions;
   ii. the total controlled VOC emissions; and,
   iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022,

P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P009 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

d. Emission Limitation-
24.9 tons for all HAPs combined on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-370, issued June 19, 1981, modified October 9, 1991. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Emissions Unit ID: **P010**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P010) - Reactor Train C/TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P010 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P010 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

BASF Corp **Facility ID: 0819070134**

PTI Application: 08-04244

Emissions Unit ID: **P010**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

   i. the total uncontrolled VOC emissions;
   ii. the total controlled VOC emissions; and,
   iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022,

P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P010 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-

Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-370, issued

June 19, 1981, modified October 9, 1991. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P012) - Pilot Reactor Train/TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P012 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P012 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

BASF Corp **Facility ID: 0819070134**

PTI Application: 08-04244

Emissions Unit ID: **P012**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P012 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-370, issued June 19, 1981, modified October 9, 1991. This permit is a chapter 31 modification to

include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P013) - Reactor Train F/TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P013 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P013 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25

1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

   i. the total uncontrolled VOC emissions;
   ii. the total controlled VOC emissions; and,
   iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or

materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of

any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P013 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-01752, issued June 14, 1989, modified October 9, 1991 and October 4, 2001. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Emissions Unit ID: **P014**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P014) - Reactor Train G/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P014 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P014 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

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Emissions Unit ID: **P014**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P014 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-01752, issued June 14, 1989, modified October 9, 1991 and October 4, 2001. This permit is a

chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Emissions Unit ID: **P015**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P015) - Reactor Train H/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P015 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P015 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

BASF Corp **Facility ID: 0819070134**

PTI Application: 08-04244

Emissions Unit ID: **P015**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P015 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations..

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-01752, issued June 14, 1989, modified October 9, 1991 and October 4, 2001. This permit is a

chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P016) - Reactor Train I/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P016 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P016 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

BASF Corp **Facility ID: 0819070134**

PTI Application: 08-04244

Emissions Unit ID: **P016**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P016 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-01752, issued June 14, 1989, modified October 9, 1991 and October 4, 2001. This permit is a

chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P021) - Water Stripping Column/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P021 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See A.2.a and A.2.c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rate from emission unit P021 shall not exceed 0.96 ton per year, per rolling 12-month summations. See section A.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 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, per rolling 12 month summations.

2. Additional Terms and Conditions

2.a OAC rule 3745-21-07(G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% reduction in OC emissions. The thermal oxidizer is employed to comply with the requirement to achieve a 98% reduction in OC emissions.

2.b 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.

2.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.

B. Operational Restrictions

1. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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 incinerator, 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.

2. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

   b. The amount of each material manufactured and/or processed, in gallons.

   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 (the sum of all the individual HAP contents from Section A.3.c. above).

   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 (the sum of all the individual HAP contents from Section A.3.f. above).

   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.

Emissions Unit ID: **P021**

*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.

D. Reporting Requirements

1. 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.

2. 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.

3. 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).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The individual maximum VOC emission rates for emissions unit P021 shall not exceed 0.96 ton per year per rolling 12-month summations.

   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-
   9.9 tons for each individual HAP/rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

   c. Emission Limitation-
   24.9 tons for all HAPs combined/rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

   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).

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

Emissions Unit ID: **P021**

2. The requirements of this permit supercedes the requirements of PTI 08-02065, issued November 2, 2000. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P022) - Reactor Train 1/ TO II

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P022 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P022 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

Issued: 12/7/2006

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.24 TPY VOC from the thermal oxidizer 2 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76

1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

Emissions Unit ID: **P022**

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

Emissions Unit ID: **P022**

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P022 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-02256, issued April 1, 1992, modified March 30, 1995 and December 18, 2001. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Emissions Unit ID: **P023**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P023) - Reactor Train 2/ TO 11

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P023 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P023 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

Issued: 12/7/2006

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.24 TPY VOC from the thermal oxidizer 2 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76

1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P023 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-04244, issued March 13, 2001. This permit is a chapter 31 modification to include federally

enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P024) - Reactor Train 3/ TO 11

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P024 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P024 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

Issued: 12/7/2006

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.24 TPY VOC from the thermal oxidizer 2 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76

1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P024 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-02256, issued April 1, 1992, modified March 30, 1995 and December 18, 2001. This permit is a

Emissions Unit ID: **P024**

chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P025) - Reactor Train 4/ TO 11

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P025 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P025 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

Issued: 12/7/2006

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.24 TPY VOC from the thermal oxidizer 2 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64
1-6	42.76
1-7	42.76

1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

i. the total uncontrolled VOC emissions;
ii. the total controlled VOC emissions; and,
iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P025 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

   d. Emission Limitation-
   24.9 tons for all HAPs combined on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable combined HAPs emission limitation above

shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-04244, issued March 13, 2001. This permit is a chapter 31 modification to include federally

enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P027) - OEM Clearcoat Spray Booth 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from this emissions unit P027 shall not exceed 12.03 tons per year, including cleanup based upon a rolling, 365-day summation of the daily emissions. The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(ii) and OAC rule 3745-35-07(B).
OAC rule 3745-21-09(U)(2)(e)(ii)	VOC emission exemption, based on maximum daily coating usage not exceeding 10 gallons of coating in any one day.
OAC rule 3745-17-11(B)	The particulate emission (PE) from this emission unit shall not exceed 0.551 pound per hour (lb/hr).
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.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions units P027 and P030 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, per rolling 12-month summations.

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The maximum annual volatile organic material usage from emission unit P027 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.

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for this 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 total 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 © x f) for all cleanup material], in tons.

   i. The rolling, 365-day summation of volatile organic material usage and VOC emissions from all coatings and cleanup materials.

      Note: The permittee has records for the previous 365 days to demonstrate compliance with this limit upon issuance of this permit.

Emissions Unit ID: **P027**

2. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

   b. The amount of each material manufactured and/or processed, in gallons.

   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 (the sum of all the individual HAP contents from Section A.3.c. above).

   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 (the sum of all the individual HAP contents from Section A.3.f. above).

   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.

3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

D. Reporting Requirements

1. 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.

2. The permittee shall submit quarterly deviation (excursion) reports that identify 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).

3. The permittee shall submit quarterly deviation (excursion) reports that identify 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).

4. These quarterly deviation reports (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

6. 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.

Emissions Unit ID: **P027**

E. Testing Requirements

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

   a. Emission Limitation -
   10 gallons per day total coating usage

   Applicable Compliance Method -
   Compliance shall be based upon the record keeping requirements specified in Section C.1. of this permit.

Emissions Unit ID: **P027**

b. Emission Limitation -
The individual maximum VOC emission rate from this emissions unit P027 shall not exceed 12.03 tons per year 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 Section C.1 of this permit.

c. Emission Limitation-
9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

d. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

e. Emission Limitation-
0.551 pound of PE per hour

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 X (1-TE) X (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).

f. Emission Limitation-
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).

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

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-03835, issued May 28, 1998. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P028) - OEM Clearcoat Train/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P028 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P028 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.
OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

BASF Corp **Facility ID: 0819070134**

PTI Application: 08-04244

Emissions Unit ID: **P028**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to

determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

   i. the total uncontrolled VOC emissions;
   ii. the total controlled VOC emissions; and,
   iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

   b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or

railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P028 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

Emissions Unit ID: **P028**

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

d. Emission Limitation-
24.9 tons for all HAPs combined on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the

recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-03908, issued November 18, 1998. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P029) - Buflovak Stripping/TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from emissions unit P029 shall not exceed 4.00 lbs per hour (lbs/hr). The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-35-07(B). See Section A.2.a. and b.
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P029 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations. 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, per rolling 12 month summations.

Emissions Unit ID: **P029**

OAC rule 3745-21-07(E)	No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car. See Section A.2.d.

Emissions Unit ID: **P029**

2. Additional Terms and Conditions

2.a 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.

2.b 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.

2.c The OC emission limitation established pursuant to OAC 3745-21-07(G)(2) and (6) includes all OC emissions from the following operations associated with this emissions unit:

i. process loading;
ii. initiator tank loading;
iii. heating;
iv. reaction;
v. blending;
vi. process transfers;
vii. filter changes; and
viii. vessel cleaning.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(G)(2) and (6).

2.d The bulk load out limit established pursuant to OAC rule 3745-21-07(E) includes the load out into tanker truck and railcar loading only for combined reactor trains P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, and P028.

2.e 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.

2.f Included in the allowable are 0.15 TPY VOC from the thermal oxidizer 1 fuel combustion.

B. 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 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.

   To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process raw materials in P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028, and P029 containing VOC components which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	7.13
1-2	14.25
1-3	21.38
1-4	28.51
1-5	35.64

1-6	42.76
1-7	42.76
1-8	42.76
1-9	42.76
1-10	42.76
1-11	42.76
1-12	42.76

2. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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.

2. 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 VOC emissions from this emissions unit, in tons [i.e, the sum of (d) and (g)].

3. The permittee shall maintain a monthly record for this emissions unit (excluding product loading subject to OAC rule 3745-21-07(E)) which includes:

   i. the total uncontrolled VOC emissions;
   ii. the total controlled VOC emissions; and,
   iii. the percent overall VOC emissions reductions achieved.

4. 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).

5. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

6. The permittee shall collect and record, on a monthly basis, the daily average gallons of any volatile photochemically reactive material that is loaded into any tank truck or railroad tank car from P001, P008, P009, P010, P012, P013, P014, P015, P016, P022, P023, P024, P025, P028 and P029 combined.

D. Reporting Requirements

1. 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.

2. 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.

3. 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 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.

   b. An identification of each month during which the rolling, 12-month individual HAP emissions rate exceeded 9.9 tons, and the actual rolling, 12-month emissions rate for each individual HAP for each such month (for the entire facility).

   c. An identification of each month during which the rolling, 12-month total combined HAP emissions rate exceeded 24.9 tons, and the actual rolling, 12-month total combined HAP emissions rate for each such month (for the entire facility).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emissions rate from emissions unit P029 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 volatile organic compound (VOC) combined emission rates from emissions 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, per rolling 12-month summations.

   Applicable Compliance Method-
   Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4 which uses the facility specific EMACT software or other software approved by RAPCA.

   c. Emission Limitation-
   9.9 tons for each individual HAP on a rolling, 12-month period

   Applicable Compliance Method-
   Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5

above.

d. Emission Limitation-
24.9 tons for all HAPs combined on a rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

f. Emission Limitation-
Organic compound emissions shall not exceed 8 lbs/hr and 40 lbs/day or an 85% reduction in OC emissions.

Applicable Compliance Method-
Compliance with the OC emissions reduction limitation above shall be based upon the recordkeeping requirements specified in Section C.3. above.

Note: OAC rule 3745-21-07(G)(2) and (6) are not applicable to final product loading; therefore, final product loading is not included in the calculation to determine compliance with OAC rule 3745-21-07(g)(2) and (6).

g. Emission Limitation-
No more than 40,000 gallons per day of any volatile photochemically reactive material, as a monthly average, can be loaded into any tank truck, trailer, or railroad tank car.

Applicable Compliance Method-
Compliance with the bulk load out limitation above shall be based upon the recordkeeping requirements specified in C.6. above.

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-03284, issued June 28, 1995, modified October 4, 2001. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P030) - OEM Clearcoat Spray Booth 2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The maximum volatile organic compound (VOC) emissions rate from this emissions unit P030 shall not exceed 12.03 tons per year, including cleanup based upon a rolling, 365-day summation of the daily emissions. The requirements of this rule shall also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(ii) and OAC rule 3745-35-07(B).
OAC rule 3745-21-09(U)(2)(e)(ii)	VOC emission exemption, based on maximum daily coating usage not exceeding 10 gallons of coating in any one day.
OAC rule 3745-17-11(B)	The particulate emission (PE) from this emission unit shall not exceed 0.551 pound per hour (lb/hr).
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.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions units P027 and P030 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, per rolling 12-month summations.

2. Additional Terms and Conditions

2.a None

B. Operational Restrictions

1. The maximum annual volatile organic material usage from emission unit 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.

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

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for this 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 total 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 © x f) for all cleanup material], in tons.

   i. The rolling, 365-day summation of volatile organic material usage and VOC emissions from all coatings and cleanup materials.

      Note: The permittee has records for the previous 365 days to demonstrate compliance with this limit upon issuance of this permit.

2. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

   b. The amount of each material manufactured and/or processed, in gallons.

   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 (the sum of all the individual HAP contents from Section A.3.c. above).

   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 (the sum of all the individual HAP contents from Section A.3.f. above).

   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.

3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

D. Reporting Requirements

1. 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.

2. The permittee shall submit quarterly deviation (excursion) reports that identify 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).

3. The permittee shall submit quarterly deviation (excursion) reports that identify 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).

4. These quarterly deviation reports (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

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6. 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.

E. Testing Requirements

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

   a. Emission Limitation -
   10 gallons per day total coating usage

   Applicable Compliance Method -
   Compliance shall be based upon the record keeping requirements specified in Section C.1. of this permit.

b. Emission Limitation -
The individual maximum VOC emission rate from this emissions unit P030 shall not exceed 12.03 tons per year 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 Section C.1 of this permit.

c. Emission Limitation-
9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

d. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.2 above.

e. Emission Limitation-
0.551 pound of PE per hour

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 X (1-TE) X (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).

f. Emission Limitation-
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).

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

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-03835, issued May 28, 1998. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P031) - Solvent Recovery Fractionator/ TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rules 3745-21-07(G)(2) and 3745-21-07(G)(6)	The organic compound (OC) emissions from emissions unit P031 shall not exceed 8 pounds per hour (lbs/hr) and 40 pounds per day (lbs/day) or meet an 85% reduction in OC emissions. See Section A.2.a. and c.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) emission rates from emissions unit P031 shall not exceed 1.67 tons per year, per rolling 12-month summations. See Section A.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 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, per rolling 12-month summations.

2. Additional Terms and Conditions

2.a OAC rule 3745-21-07(G)(2) limits organic compound (OC) emissions to 8 pounds per hour and 40 pounds per day or requires an 85% reduction in OC emissions. The thermal oxidizer is employed to comply with the requirement to achieve a 98% reduction in OC emissions.

2.b 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, P028,P029, P031, T001 and the specific tanks identified in emissions units T029.

2.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.

B. Operational Restrictions

1. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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 incinerator, 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.

2. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or materials processed.

   b. The amount of each material manufactured and/or processed, in gallons.

   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 (the sum of all the individual HAP contents from Section A.3.c. above).

   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 (the sum of all the individual HAP contents from Section A.3.f. above).

   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.

D. Reporting Requirements

1. 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.

2. 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.

3. 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).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

   a. Emission Limitation-
   The maximum VOC emission rates for emissions unit P031 shall not exceed 1.67 tons per year per rolling 12-month summations.

   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-
   9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.3 above.

c. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.3 above.

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).

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-03835, issued May 28, 1998. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (T001) - Dirty Water Tank/TO 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-21-07(D)(2)	Any tank used to store a volatile photochemically reactive material, as defined in OAC rule 3745-21-01 (C)(7), shall be equipped with a submerged fill pipe, as defined in OAC rule 3745-21-01 (C)(6).
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions units T001 shall not exceed 0.58 ton per year, per rolling 12-month summations. See Section A.2.a. 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, per rolling 12 month summations

2. Additional Terms and Conditions

2.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.

2.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.

B. Operational Restrictions

1. The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. 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 incinerator, 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.

2. The permittee shall collect and record each month the following information for the entire facility:

   a. The company identification of each material manufactured (recipe) and/or

materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

D. Reporting Requirements

1. 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.

2. 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.

3. 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).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in

accordance with the following methods:

a. Emission Limitation-
The individual maximum VOC emission rates for emissions unit T001 shall not exceed 0.58 ton per year per rolling 12 month summations.

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-
9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.3 above.

c. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.3 above.

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).

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-02065, issued

November 2, 2000. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (T029) - Tank Farm (115 tanks)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(D)(1) and (2) and 40 CFR, Part 60, Subpart Kb
40 CFR, Part 60, Subpart Kb	none (see sections C. 2 and 3.)
OAC rule 3745-21-07(D)(1) and (2)	see section B.1.
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emission rates from emissions units T029 and T030 shall not exceed 16.11 tons per year, per rolling 12-month summations. 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, per rolling 12 month summations.

2. Additional Terms and Conditions

2.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

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Tanks 101 and 106 are connected to thermal oxidizer I; tank 107vents 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.

2.b For those tanks identified in A.I.2.a. above as controlled by a thermal oxidizer (thermal oxidizer I and 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.] [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.]

2.c The maximum annual volatile organic compound input to emissions units T029 and T030 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 A.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.

To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process material VOC components in T029 and T030 which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	2.69
1-2	5.37
1-3	8.06
1-4	10.75
1-5	13.44
1-6	16.11
1-7	16.11
1-8	16.11
1-9	16.11
1-10	16.11
1-11	16.11
1-12	16.11

B. Operational Restrictions

1. Any tank used to store a volatile photochemically reactive material, as defined in OAC rule 3745-21-01 (C)(7), shall be equipped with a submerged fill pipe, as defined in OAC rule 3745-21-01 (C)(6).

2. For those storage tanks vented to either the Resin I thermal oxidizer or Resin II thermal oxidizer:

The average temperature of the combustion chamber within the thermal oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that 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 incinerator, 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.

2. 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.

3. 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.

4. 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. Whether the material being stored is defined as a volatile photochemically reactive material.

d. The throughput of the material, in gallons.

e. The true vapor pressure of the material, in psia.

f. The calculated volatile organic compound emissions, in pounds.

g. The rolling 12-month VOC emissions, in tons.

5. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual

HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the resin I thermal oxidizer or resin II 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.

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

3. 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 VOC emission rate from T029 and T030 exceeded 16.11 tons, and the actual rolling, 12-month emission rate for each such month.

   b. 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).

   c. 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).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. The permittee shall submit notification to the Director (Regional Air Pollution Control Agency) of any time when a volatile photochemically reactive material is stored in a tank that is not equipped with submerged fill. The notification shall be submitted within 30 days of the date of the occurrence.

6. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in

accordance with the following methods:

a. Emission Limitation-
The volatile organic compound (VOC) combined emission rates from emissions units T029 and T030 shall not exceed 16.11 tons per year, per rolling 12-month summations.

Applicable Compliance Method-
Compliance with the annual allowable VOC emission limitation above shall be based upon the monthly record keeping requirements specified in section C.4.

b. Emission Limitation-
9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

c. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

Emissions Unit ID: **T029**

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-04243, issued April 10, 2001, modified October 30, 2001. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.

Issued: 12/7/2006

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (T030) - Fuel Oil Tank/ TO II

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Kb
40 CFR, Part 60, Subpart Kb	See section C.1.
OAc rule 3745-21-09(L)	exempt, pursuant to OAC rule 3745-21-09 (L)(2) [See Section A.1.2.a.]
OAC rule 3745-35-07(B) (synthetic minor to avoid Title V and 40 CFR Part 63)	The volatile organic compound (VOC) combined emissions rates from emissions units T029 and T030 shall not exceed 16.11 tons per year, per rolling 12-month summations 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 TPY for any single HAP and 24.9 TPY for any combination of HAPs, per rolling 12-month summations.

2. Additional Terms and Conditions

2.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.

2.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.]

2.c The maximum annual volatile organic compound input to emissions units T029

and T030 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 A.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.

To ensure enforceability during the first twelve calendar months of operation following the issuance of this permit, the permittee shall not process material VOC components in T029 and T030 which results in an exceedance of the maximum allowable cumulative VOC emissions specified in the following table:

Month	Maximum Allowable Cumulative VOC Emissions (tons/month)
1	2.69
1-2	5.37
1-3	8.06
1-4	10.75
1-5	13.44
1-6	16.11
1-7	16.11
1-8	16.11
1-9	16.11
1-10	16.11
1-11	16.11
1-12	16.11

B. 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).

2. The average temperature of the combustion chamber within the resin II thermal

oxidizer, for any 3-hour block of time while the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

C. 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.

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.

   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 incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission testing 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.

3. 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. Whether the material being stored is defined as a volatile photochemically reactive material.

d. The throughput of the material, in pounds.

e. The true vapor pressure of the material, in psia.

f. The calculated volatile organic compound emissions, in pounds.

g. The rolling 12-month VOC emissions, in tons.

4. The permittee shall collect and record each month the following information for the entire facility:

a. The company identification of each material manufactured (recipe) and/or materials processed.

b. The amount of each material manufactured and/or processed, in gallons.

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 (the sum of all the individual HAP contents from Section A.3.c. above).

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 (the sum of all the individual HAP contents from Section A.3.f. above).

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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the resin II 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.

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

3. 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 VOC emission rate from T029 and T030 exceeded 16.11 tons, and the actual rolling, 12-month emission rate for each such month.

   b. 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).

c. 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).

4. These quarterly deviation (excursion) reports shall be submitted to the Director (Regional Air Pollution Control Agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter. If no deviation occurred during a calendar quarter, the permittee shall submit a report which states that no deviation occurred during the calendar quarter.

5. The permittee shall submit notification to the Director (Regional Air Pollution Control Agency) of any time when a volatile photochemically reactive material is stored in a tank that is not equipped with submerged fill. The notification shall be submitted within 30 days of the date of the occurrence.

6. 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.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 above shall be determined in accordance with the following methods:

a. Emission Limitation-
The volatile organic compound (VOC) combined emission rates from emissions units T029 and T030 shall not exceed 16.11 tons per year, per rolling 12-month summations.

Applicable Compliance Method-
Compliance with the annual allowable OC emission limitation above shall be based upon the monthly record keeping requirement specified in section C.4.

b. Emission Limitation-
9.9 tons for each individual HAP/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable individual HAP emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

c. Emission Limitation-
24.9 tons for all HAPs combined/rolling, 12-month period

Applicable Compliance Method-
Compliance with the annual allowable combined HAPs emission limitation above shall be based upon the record keeping requirements specified in Section C.5 above.

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).

F. Miscellaneous Requirements

1. All of the terms and conditions in this permit are federally enforceable.

2. The requirements of this permit supercedes the requirements of PTI 08-04243, issued April 10, 2001, modified October 30, 2001. This permit is a chapter 31 modification to include federally enforceable facility wide synthetic minor limitations for VOCs and HAPs.