Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/27/2012

Certified Mail

Facility ID: 0302020371
Permit Number: P0105128
County: Allen

Joseph Bianco
INEOS USA LLC
1900 Fort Amanda Rd.
P.O. Box 628, Lima, OH 45802
Lima, OH 45804

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 3/2/2012. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

If you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

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

Cc: Ohio EPA DAPC, Northwest District Office

Response to Comments

Facility ID:	0302020371
Facility Name:	INEOS USA LLC
Facility Description:	Industrial Organic Chemical Production
Facility Address:	1900 Fort Amanda Rd. Lima, OH 45804 Allen County
Permit:	P0105128, Title V Permit - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Lima News on 03/03/2012. The comment period ended on 04/02/2012.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

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

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

1. Topic: Inclusion of Additional Non-Insignificant Emissions Unit

a. Comment: Emissions units P803, P804 and P805 were included in the Title V renewal application for fugitive emissions to create three distinct areas of the facility for leak detection and repair (LDAR) and simplify record keeping for LDAR. These three emissions units need to be added to the permit.

b. Response: P803, P804 and P805 were added to the permit. P803 is a separate emissions unit for Barex fugitives, and P804 and P805 are an emissions group for acrylonitrile and CAPU fugitives, since these two emissions units have identical rule applicability. Rules were added as follows: P803: OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subparts A and VV; and 40 CFR, Part 63, Subpart JJJ. P804 and P805: OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subparts A and VV; and 40 CFR, Part 63, Subparts H and YY.

2. Topic: Incorrect classification of P082

a. Comment: P082 was listed in the draft permit as an insignificant emissions unit, when it should be non-insignificant.

b. Response: Changed status to non-insignificant and added to the permit. There are no

applicable rules for this cooling tower, since the emissions are negligible, due to low flow rate of 2,750 gallons/minute. Referenced the exemptions for OAC rule 3745-17-07 and 17-11 in permit.

3. Topic: Incorrect classification of P077

a. Comment: P077 was listed in draft permit as a non-insignificant emissions unit, when it should be insignificant.

b. Response: Moved P077 to insignificant emissions unit list.

4. Topic: Deletion of trivial emissions unit from permit

a. Comment: B001 – 6 comfort air heaters, T122 – organic dike collection tank and T123 – reactor cleanings tank, were not in the renewal application, are trivial emissions units and should not be in the permit.

b. Response: Confirmed these three emissions units are trivial, and deleted from permit.

5. Topic: Insignificant emissions units without applicable requirements

a. Comment: G001, P083, P085, P086, P088, T003, T005, T117, T119, T120, T121 and T130 are insignificant emissions units all without applicable requirements, and should either be moved to a different section, or added to the permit.

b. Response: No action taken. DAPC does not include insignificant emissions units in the permit that do not have any applicable requirements.

6. Topic: Insignificant emissions unit with applicable requirements

a. Comment: P807 – Barex wastewater handling was included in the renewal application, but was not included in permit. Please include this emissions unit in the permit as an insignificant emissions unit with requirements.

b. Response: P807 was added to permit as an insignificant emissions unit with requirements.

7. Topic: Equipment description changes for several emissions units

a. Comment: Several emissions units, both non-insignificant and insignificant, have equipment description changes that needed to be consistent with renewal application.

b. Response: The requested description changes were made, and PTI issuance dates were added in the insignificant emissions unit section.

8. Topic: CAM is not applicable for P035, P048, P074 and P075 for VOC emissions

a. Comment: CAM is not applicable for these four emissions units for VOC emissions due to 40 CFR, Part 63, Subparts F and G for HAPs constituting MACT control requirements for VOC, since the VOC emissions are already subject to MACT requirements; and since 40 CFR, Part 60, Subparts III and/or NNN already are applicable requirements.

b. Response: Deleted CAM for VOC for these four emissions units.

9. Topic: Revisions needed for Federal and State rule applicability

a. Comment: Some of the federal regulations listed in the permit either are not applicable or need to be added for certain emissions units in both the facility-wide terms and individual terms for emissions units. Delete or add the regulatory citations for these emissions units as follows:

Emissions unit	Federal/State Regulations	Delete the regulation or Add the regulation
T084, T129	40 CFR, Part 60, Subpart Kb	Add
P035, P048, P062, P074, P075	40 CFR, Part 60, Subpart VV	Delete
P803, P804, P805	40 CFR, Part 60, Subpart VV	Add
P035	40 CFR, Part 60, Subpart NNN	Delete
P050	40 CFR, Part 63, Subpart F	Add
P035, P048, P050, P062, P074, P075	40 CFR, Part 63, Subpart H	Delete
P804, P805	40 CFR, Part 63, Subpart H	Add
T121, T122, T123	40 CFR, Part 63, Subpart JJJ	Delete
P803	40 CFR, Part 63, Subpart JJJ	Add
T120	40 CFR, Part 63, Subpart EEEE	Delete
B001	40 CFR, Part 63, Subpart DDDDD	Delete
P035, P048, P050, P051, P052, P062, P074, P075	OAC rule 3745-21-09(DD)	Delete
P803, P804, P805	OAC rule 3745-21-09(DD)	Add
P052, P075, P804, P805, T084, T129	40 CFR, Part 63, Subpart YY	Add
P084	40 CFR, Part 63, Subpart ZZZZ	Add

b. Response: Regulatory citations changed as requested.

10. Topic: P006 - OAC rule 3745-31-05(A)

a. Comment: Delete OAC rule 3745-31-05(A) from section 1.b)(1) since BAT is not mentioned in the PTI issued 4/17/74.

b. Response: OAC rule 3745-31-05(A) kept in this term in order to properly establish equivalency language for comparison to 40 CFR, Part 63, Subpart JJJ. Deleted the reference to OAC rule 3745-21-07(G) since it is not applicable.

11. Topic: P006, P009, P010, P067 – LDAR language

a. Comment: Term 1.b)(2)d. should be deleted, since all LDAR/leak emissions are included with P803 - P805.

b. Response: Deleted term 1.b)(2)d. for each emissions unit.

12. Topic: P009. P010, P067 - OAC rule 3745-31-05(A)(3)

a. Comment: Delete OAC rule 3745-31-05(A)(3) from section 1.b)(1) since BAT is not mentioned in the PTI issued 4/17/74.

b. Response: OAC rule 3745-31-05(A)(3) kept in this term in order to properly establish equivalency language for comparison to 40 CFR, Part 63, Subpart JJJ.

13. Topic: P011 – term 3.d)(4) for cyclone CAM plan

a. Comment: Add the clarifying words to first sentence "that could affect the worst-case emissions".

b. Response: No change made. Any changes to cyclone operating parameters that could change the emissions will need to be re-verified, not just those changes that may affect only worst case emissions.

14. Topic: P035 – terms 4.d)(15) and 4.e)(7) – originally 4.d)(18) and 4.e)(9) in draft permit – combustion temperature of AOGI

a. Comment: Change "average combustion temperature" for the AOGI to "daily average combustion temperature" and delete "3-hour block of time" and the "+/- 50 degrees F requirement" to be consistent with 40 CFR, Part 63, Subpart G.

b. Response: Agree with company, and made these changes.

15. Topic: P035 – term 4.f)1.d and 4.f)1.f – applicable compliance method for CO and NOx daily emissions limitations

a. Comment: Stack testing should not be required for CO and NOx based on testing completed in July 2010 and Engineering Guide #16. The company submitted a memo with this request.

b. Response: Disagree with company, and no changes made. The hourly emissions for CO and NOx cannot be extrapolated for comparison to the daily emissions limitations of 5,736 lbs/day and 6,614 lbs/day respectively, since the combustion temperature during the stack test was purposely lowered to determine the lowest combustion temperature possible and still maintain

compliance with these emissions limitations and the NESHAPS requirement for 98% destruction of VOC.

Further, the annual fee emission report indicates that actual emissions are greater than 100 tons/yr for each pollutant.

Thus, Engineering Guide shows that stack testing is required every 2.5 years for CO and NOx.

16. Topic: P035 – term 4.f)(1)l. – applicable compliance method for non-methane hydrocarbons (NMHC) hourly emission limitation

a. Comment: Stack testing should not be required for NMHC based on testing completed in January 2011 and Engineering Guide #16. The company submitted a memo with this request.

b. Response: Agree with company. Deleted stack testing requirement and changed to compliance based on previous stack testing and Engineering Guide #16. This is due to actual emissions less than 100 tons/yr and tested emission rate was less than 50% of allowable.

17. Topic: P035 – term 4.f)(1)n. – applicable compliance method for 98% reduction efficiency for VOC

a. Comment: Stack testing should not be required for VOC reduction efficiency based on testing completed in January 2011 and Engineering Guide #16. The company submitted a memo with this request.

b. Response: Agree with company. Deleted stack testing requirement and changed to compliance based on previous stack testing and Engineering Guide #16. This is due to adequate margin of compliance for the reduction efficiency during the January 2011 stack test.

18. Topic: P035 – term 4.f)(2) – stack testing for CO, NOx and NMHC

a. Comment: Stack testing should not be required for CO, NOx and NMHC based on testing completed in July 2010 and January 2011 and Engineering Guide #16. The company submitted a memo with this request.

b. Response: Same response as for comment #15 through #17. Deleted testing requirement for NMHC, and kept testing requirements in permit for CO and NOx.

19. Topic: P038 – terms 5.d)(1), d)(2) and d)(4) – scrubber liquid flow rate

a. Comment: The 20 gallons per minute scrubber liquid flow rate should be shown as a daily average.

b. Response: Agree with company, and added the daily average.

20. Topic: P038 – term 5.d)(5) for scrubber CAM plan

a. Comment: Add the clarifying words to first sentence “that could affect the worst-case emissions”.

b. Response: Disagree with company and no changes made. Any changes to scrubber operating parameters that could change the emissions will need to be re-verified, not just those changes that may affect only worst case emissions.

21. Topic: P038 – term 5.e)(1) for scrubber reporting requirements

a. Comment: Term e)(1)b. was requested to be deleted, which requires reporting any period of time when the emissions unit is operating and process emissions are not vented to the scrubber.

b. Response: Disagree with company and no changes made. This is standard reporting language needed in this permit for times when the control device may not be operating due to a malfunction.

22. Topic: P039 – term 6.d)(1), d)(3) and e)(1) – visible emissions checks and designation of the thermal oxidizer as the final control device in series.

a. Comment: Visible emissions checks and CAM language should be for the thermal oxidizer stack, not the cyclone, since the exhaust for this emissions unit is from the thermal oxidizer located after the cyclone.

b. Response: Agree with company. Changed the visible emissions checks, CAM language and reporting for any visible emissions to the thermal oxidizer stack.

23. Topic: P039 and P065 – terms 6.d)(5) and 12.d)(4) for cyclone CAM plan

a. Comment: Add the clarifying words to first sentence "that could affect the worst-case emissions".

b. Response: Disagree with company and no changes made. Any changes to cyclone operating parameters that could change the emissions will need to be re-verified, not just those changes that may affect only worst case emissions.

24. Topic: P043 – term 7.b)(1)g. – incorrect rule references

a. Comment: Delete references to OAC rule 3745-21-07(G) and 3745-18-06(E), as these are not applicable

b. Response: These references were erroneous (cut and paste error). Deleted both references.

25. Topic: P050 – term 9.c)(1) – scrubber water flow rate

a. Comment: The minimum scrubber water flow rate was already established in April 2005, so there is no need to require establishing this rate.

b. Response: Agree with company, and added the April 2005 date for clarification.

26. Topic: P050 – term 9.f)(1) – HAP removal efficiency testing not necessary

a. Comment: Previous HAP removal efficiency testing is sufficient to demonstrate compliance, and repeat testing is not required by the HON rules.

b. Response: Agree with company. Deleted all testing requirements for HAP removal efficiency.

27. Topic: P065 – term 12.f)(1)c. – Test Method for PM_{10}

a. Comment: Test Method 202 is not appropriate, since the PM_{10} limit was established in a 1996 PTI, at which time condensable emissions were not considered. Only Test Method 201/201A should be used to demonstrate compliance.

b. Response: Agree with company, and changed to Test Method 201/201A.

28. Topic: P068 – term 13.b)(1)d. – reference to term 13.b)(2)d.

a. Comment: Reference to term b)(2)d. is missing in the Applicable Emissions Limitations and/or Control Requirements table.

b. Response: Agree with company, and added this reference.

29. Topic: P068 – term 13.d)(1), d)(2) and e)(1) – scrubber liquid flow rate

a. Comment: The 10 gallons per minute scrubber liquid flow rate should be shown as a daily average.

b. Response: Agree with company, and added the daily average.

30. Topic: P068 – term 13.e)(1) for scrubber reporting requirements

a. Comment: Term e)(1)b. was requested to be deleted, which requires reporting any period of time when the emissions unit is operating and process emissions are not vented to the scrubber.

b. Response: Disagree with company and no changes made. This is standard reporting language needed in this permit for times when the control device may not be operating due to a malfunction.

31. Topic: P075 – terms 15.d)(4) and 15.e)(9) – combustion temperature of thermal oxidizer

a. Comment: Change "average combustion temperature" for the thermal oxidizer to "daily average combustion temperature" and delete "3-hour block of time" and the "+/- 50 degrees F requirement" to be consistent with 40 CFR, Part 63, Subpart G.

b. Response: Agree with company, and made these changes.

32. Topic: P075 – term 15.f)(2) – stack testing for PM_{10}, SO2 and NOx

a. Comment: Stack testing should not be required forPM_{10}, SO2 and NOx based on testing completed in November 2004 and Engineering Guide #16. The company submitted a memo with this request.

b. Response: Disagree with company, and no changes made. During the November 2004 stack test, the percent of allowable exceeded 50% for each of these three pollutants.

33. Topic: P078 – equipment description and term 16.b)(2)a.

a. Comment: This emissions unit is controlled by one dust collector, not two baghouses. Please change the description.

b. Response: Agree with company, and changed description.

34. Topic: P078 – term 16.d)(1)

a. Comment: Visible emissions checks should be daily, not weekly, to be consistent with PTI #0109073.

b. Response: Agree with company, this was a cut and paste error, and changed frequency to daily.

35. Topic: P081 – term 17.b)(1)c. – typographical error

a. Comment: Senate Bill 265 reference is missing "(a)(ii)" after OAC rule 3745-31-05(A)(3).

b. Response: Agree with company, and added "(a)(ii)".

36. Topic: P081 – term 17.d)(1) – typographical error

a. Comment: Total dissolved solids has incorrect abbreviation of TSD, this should be TDS.

b. Response: Agree with company, and corrected this to TDS.

Ohio | Environmental Protection Agency

PRELIMINARY PROPOSED

Division of Air Pollution Control
Title V Permit
for
INEOS USA LLC

Facility ID:	0302020371
Permit Number:	P0105128
Permit Type:	Renewal
Issued:	6/27/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
INEOS USA LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Scheduled Maintenance 6
4. Risk Management Plans 6
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Inspections and Information Requests 14
26. Scheduled Maintenance/Malfunction Reporting 14
27. Permit Transfers 15
28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15

B. Facility-Wide Terms and Conditions 16
C. Emissions Unit Terms and Conditions 24
1. P006, Barex #1 Pasteline 25
2. Emissions Unit Group, Barex Reactors, P009, P010, P067 27
3. P011, Barex #1 Strand Dryer 31
4. P035, Acrylonitrile Plant #2 Reaction and Absorption Section 35
5. P038, Catalyst Spray Dryer and #2 Calciner 50
6. P039, Catalyst #1 Calciner 56
7. P043, Barex #1 Fines Dryer 60
8. P048, Acetonitrile Reaction and Absorption Section 64
9. P050, Nitriles Loading Rack 69
10. P051, Nitriles Drum Loading System 72
11. P052, HCN Loading Rack 73
12. P065, Barex #2 Strand Dryer 75
13. P068, Barex #2 Pasteline 81
14. P074, Acetonitrile Recovery and Purification Section 85
15. P075, Acrylonitrile Plant #2 Recovery & Purification Section 90
15. P078, Barex Dust Collection System 104
16. P080, Cooling Tower #1 – (CAPU) 107
17. P081, Cooling Tower #2 – (AN/North) 110
18. P082, Barex Cooling Tower 115
19. P803, Barex Fugitive Emissions 117
20. Emissions Unit Group – Fugitive Emissions - P804, P805 120

Authorization

Facility ID: 0302020371
Facility Description: Industrial Organic Chemical Production
Application Number(s): A0037821, A0038821, A0043223, A0043357
Permit Number: P0105128
Permit Description: Renewal Title V Permit for an Industrial Organic Chemical Production Facility
Permit Type: Renewal
Issue Date: 6/27/2012
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

INEOS USA LLC
1900 Fort Amanda Rd.
Lima, OH 45804

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

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b) 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 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.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northwest District Office.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the

Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; orthe permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(2) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(3) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. An identification of each term or condition of this permit that is the basis of the certification.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittent.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that

qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)Records Retention Requirements Under State Law Only

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.

25. 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.

(Authority for term: OAC rule 3745-77-07(C))

26. 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).

27. 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.

(Authority for term: OAC rule 3745-77-01(C))

28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP-approved versions of OAC Chapters 3745-17, 3745-18 and 3745-21; or in 40 CFR, Part 60, Subpart Kb; or in 40 CFR, Part 63, Subparts F, G, H, JJJ, EEEE and DDDDD.

   a) P003 - Barex Elastomer Charging System and Blend Tank [PTI issued 4/17/1974, no PTI # established];

   b) P018 - Catalyst Calciner Heaters;

   c) P061 - Barex Solids Handling System [PTI #03-03552, issued 1/8/1993];

   d) P062 – Deepwell Pretreatment Area [PTI #03-03549, modification issued 3/9/2004];

   e) P069 – Barex #2 Fines Dryer [PTI #03-03369, issued 11/29/1991

   f) P077 – Ammonia Recovery System [PTI #03-13232, issued 8/4/99];

   g) P084 – Fire Water Pump – diesel fuel, 460 hp, <500 hr/yr [PBR #07135, approved 7/29/2009];

   h) P807 – Barex Wastewaster Handling (misc.) [PTI #03-3370, issued 12/9/1988];

   i) T001 - 22,000 gallon Barex Acrylonitrile Tank – internal floating roof [PTI issued 4/17/1974, no PTI # established];

   j) T006 – 13,530 gallon Barex Recovered Monomer Tank (T-18) – fixed roof [PTI issued 4/17/1974, no PTI # established];

   k) T015 - 30,000 gallon Acetonitrile Tank (T-35) – internal floating roof;

   l) T019 - 6,132 gallon Barex Recovered Monomer Tank (T-8) – fixed roof [PTI issued 4/17/1974, no PTI # established];

   m) T023 - 781,000 gallon Acrylonitrile Tank (T-1) – internal floating roof;

   n) T024 - 781,000 gallon Acrylonitrile Tank (T-2) – internal floating roof;

   o) T025 - 650,000 gallon Acrylonitrile Tank (T-2A) - internal floating roof;

   p) T026 – 86,520 gallon Acrylonitrile Tank (T-3) - internal floating roof;

   q) T027 - 120,000 gallon Acrylonitrile Tank (T-3A) - internal floating roof;

   r) T028 – 86,520 gallon Acrylonitrile Tank (T-4) - internal floating roof;

s) T031 – 2,538 gallon Oxazole Filter Feed Tank (T-7 – fixed roof);

t) T032 - 329,000 gallon Acrylonitrile Tank (T-51) - internal floating roof;

u) T033 - 329,000 gallon Acrylonitrile Tank (T-52) - internal floating roof;

v) T065 - 22,000 gallon Filter Feed Tank (T-101) – fixed roof [PTI #03-03549, issued 1/11/1991];

w) T066 - 6,000 gallon Wastewater Clarifier Sludge Storage Tank (T-111) – fixed roof [PTI #03-03549, issued 1/11/1991];

x) T067 - 11,800 gallon Filtered Wastewater Storage Tank (T-103) – fixed roof [PTI #03-03549, issued 1/11/1991];

y) T068 - 8,500 gallon Filtered Wastewater Reject Water Tank (T-102) – fixed roof [PTI #03-03549, issued 1/11/1991];

z) T069 - 960,000 gallon West Deepwell Surge Tank (T-105) - internal floating roof [PTI #03-03549, issued 1/11/1991];

aa) T070 - 960,000 gallon East Deepwell Surge Tank (T-106) - internal floating roof [PTI #03-03549, issued 1/11/1991];

bb) T073 - 300,000 gallon Wastewater Tank – fixed roof [PTI #03-03554, issued 4/13/1988];

cc) T079 - 677,000 gallon Crude Acrylonitrile Tank (T-5) - internal floating roof [PTI #03-05554, issued 4/17/1991];

dd) T080 - 677,000 gallon Off-Test Product Acrylonitrile Tank (T-6) - internal floating roof [PTI #03-05554, issued 4/17/1991];

ee) T081 - 99,000 gallon North Crude Acetonitrile Tank (T-41) - internal floating roof [PTI #03-05680, issued 6/19/1991];

ff) T082 - 99,000 gallon North Crude Acetonitrile Tank (T-42) - internal floating roof [PTI #03-05680, issued 6/19/1991];

gg) T084 – 39,800 gallon South HCN Drum (storage tank) [PTI #03-06435, issued 1/27/1993]

hh) T088 - 7,180 gallon Formaldehyde Tank – fixed roof [PTI #03-06956, issued 1/13/1993];

ii) T090 - Used Oil Storage Tank [PTI #03-07280, issued 7/8/1993];

jj) T091 – 9,800 gallon Soda Ash Storage Tank [PTI #03-07457, issued 9/1/1993];

kk) T092 - 92,000 gallon Acrylonitrile Slopwater Tank (T-8) - internal floating roof;

ll) T093 - 98,000 gallon Acetonitrile Tank (T-50) - internal floating roof [PTI #03-10545, issued 12/17/1997];

mm) T113 - 36,100 gallon Acetonitrile Tank (T-26) – internal floating roof [PTI #03-13314, issued 12/15/1999];

nn) T114 - 14,700 gallon Nitriles Storage Tank (T-9) – fixed roof [PTI #03-13347, issued 4/5/2000];

oo) T115 – 29,600 gallon Acetonitrile Tank (T-36) - internal floating roof [PTI #03-13593, issued 7/24/2001];

pp) T124 – 6,718 gallon HQ Tank;

qq) T125 – 1,504 gallon MEHQ Tank;

rr) T126 - 8,700 gallon Acetonitrile Tank (T-23) – fixed roof;

ss) T127 - 8,700 gallon Acetonitrile Tank (T-24) – fixed roof;

tt) T128 – 16,900 gallon Brine Refrigeration System Tank; and

uu) T129 – 50,492 gallon North HCN Drum (storage tank) [PTI #P0105820, issued 12/11/2009].

[Authority for term: OAC rule 3745-77-07(A)(13)]

3. The following emissions unit contained in this permit is subject to 40 CFR, Part 60, Subpart Db: P035. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

4. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart Kb: T079, T080, T081, T082, T084, T093, T113, T114, T115 and T129. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

5. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart VV: P803, P804 and P805. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

6. The following emissions unit contained in this permit is subject to 40 CFR, Part 60, Subpart III: P035. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

7. The following emissions units contained in this permit are subject to 40 CFR, Part 60, Subpart NNN: P048, P074 and P075. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

8. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart F: P035, P048, P050, P062, P074, P075, P080, P081, T015, T023, T024, T025, T026, T027, T028, T031, T032, T033, T065, T066, T067, T068, T069, T070, T073, T079, T080, T081, T082, T092, T093, T113, T114,

T115, T124, T125, T126, T127 and T128. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

a) The following terms are applicable for insignificant emissions units P062, T015, T023, T024, T025, T026, T027, T028, T031, T032, T033, T065, T066, T067, T068, T069, T070, T073, T079, T080, T081, T082, T092, T093, T113, T114, T115, T124, T125, T126, T127 and T128:

(1) The permittee shall comply with the applicable standards in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(3) The permittee shall comply with the applicable reporting requirements in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

9. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart G: P035, P048, P050, P062, P074, P075, T015, T023, T024, T025, T026, T027, T028, T031, T032, T033, T065, T066, T067, T068, T069, T070, T073, T079, T080, T081, T082, T092, T093, T113, T114, T115, T124, T125, T126, T127 and T128. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

a) The following terms are applicable for insignificant emissions units P062, T015, T023, T024, T025, T026, T027, T028, T031, T032, T033, T065, T066, T067, T068, T069, T070, T073, T079, T080, T081, T082, T092, T093, T113, T114, T115, T124, T125, T126, T127 and T128:

(1) The permittee shall comply with the applicable standards in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(3) The permittee shall comply with the applicable reporting requirements in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(4) The permittee shall comply with the applicable testing requirements in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

10. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart H: P804 and P805. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart H]

11. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart JJJ: P003, P006, P009, P010, P011, P043, P061, P065, P067, P068, P069, P803, P807, T001, T006 and T019. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

a) The following terms are applicable for insignificant emissions units P003, P061 and P069:

(1) These emissions units are Group 2 continuous process vents as defined in 40 CFR 63.1312.

(2) The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(3) The permittee shall comply with the equipment leak provisions listed in 40 CFR, Part 63, Subpart JJJ (See 40 CFR 63.1310 – 63.1336).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(4) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(5) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents listed in 40 CFR, Part 63, Subpart JJJ. The time periods or deadlines specified in these requirements may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i) [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(6) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

b) The following terms are applicable for insignificant emissions units T001:

(1) This emissions unit is a Group 1 storage vessel as defined in 40 CFR 63.1312.

(2) The permittee shall comply with the applicable storage vessel provisions in 40 CFR 63.1314.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

12. The following insignificant emissions unit contained in this permit is subject to 40 CFR, Part 63, Subpart EEEE: T088. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

a) The permittee shall comply with the applicable emission limitations, operating limits and work practice standards in 40 CFR, Part 63, Subpart EEEE [See 40 CFR 63.2330 – 63.2406].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

b) The permittee shall comply with the applicable monitoring and record keeping requirements in 40 CFR, Part 63, Subpart EEEE [See 40 CFR 63.2330 – 63.2406].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

c) The permittee shall comply with the applicable reporting requirements in 40 CFR, Part 63, Subpart EEEE [See 40 CFR 63.2330 – 63.2406].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

d) The permittee shall comply with the applicable testing requirements in 40 CFR, Part 63, Subpart EEEE [See 40 CFR 63.2330 – 63.2406].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart EEEE]

13. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD, in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD).

The following emissions unit in this permit is subject to the aforementioned requirements: P018.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart DDDDD]

14. The following emissions units contained in this permit are subject to OAC rule 3745-21-09(DD): P803, P804 and P805. The complete leak detection and repair requirements may be accessed via the Internet from the Ohio EPA's website http://www.epa.state.oh.us or by contacting the Ohio EPA, Northwest District Office.

    [OAC rule 3745-77-07(C)(1)]

15. Pursuant to 40 CFR, Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P011, P038, P039 and P065 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

    [OAC rule 3745-77-07(C)(1), 40 CFR, Part 64]

16. The following emissions units contained in this permit are subject to 40 CFR, Part 63, Subpart YY: P052, P075, P804, P805, T084 and T129. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    [OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

17. The following emissions unit contained in this permit is subject to 40 CFR, Part 63, Subpart ZZZZ: P084. The complete MACT requirements, including the MACT General Provisions may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gpoaccess.gov or by contacting the Ohio EPA, Northwest District Office.

    [OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart ZZZZ]

C. Emissions Unit Terms and Conditions

1. P006, Barex #1 Pasteline

Operations, Property and/or Equipment Description:

Barex Plant #1 Pasteline and associated equipment. Combines Barex reactor batches, coagulates latex to make strands, washes strands. Refer to overall Barex process description and flow diagram. Installation authorized by Barex plant PTI dated 4/17/74 (no reference #).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.
b.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit is an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b. through b)(2)c., d)(1), e)(1) and f)(1)
c.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
d.	OAC rule 3745-31-05(A)	The requirements of this rule are equivalent to the requirements of 40 CFR, Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 2 continuous process vent as defined in 40 CFR 63.1312.

c. The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents listed in 40 CFR, Part 63, Subpart JJJ. The time periods or deadlines specified in these requirements may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i) [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

(1) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group, Barex Reactors, P009, P010, P067

EU ID	Operations, Property and/or Equipment Description
P009	Barex Reactor No. 1 and associated equipment, with condenser and thermal oxidizer. Reaction of raw materials to produce nitrile copolymer resins. Refer to overall Barex process description and flow diagram. Installation authorized by Barex plant PTI dated 4/17/74 (no reference #)
P010	Barex Reactor No. 2 and associated equipment, with condenser and thermal oxidizer. Reaction of raw materials to produce nitrile copolymer resins. Refer to overall Barex process description and flow diagram. Installation authorized by Barex plant PTI dated 4/17/74 (no reference #)
P067	Barex Reactor No. 3 and associated equipment, with condenser and thermal oxidizer. Reaction of raw materials to produce nitrile copolymer resins. Refer to overall Barex process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.
b.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), these emissions units are existing affected sources consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that are manufacturing the same primary product, and that are located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b. through b)(2)c., c)(1), d)(1) through d)(4), e)(1) and f)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
d.	OAC rule 3745-31-05(A)(3)	Emissions units P009 and P010: The requirements of this rule are equivalent to the requirements of 40 CFR, Part 63, Subpart JJJ.
e.	OAC rule 3745-31-05(A)(3) [PTI #03-3369, issued 1/11/91 (modification)]	0.12 lb volatile organic compounds (VOC)/hr from emissions unit P067 See b)(2)e. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

a. These emissions units are not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. Each emissions unit is a Group 1 batch process vent as defined in 40 CFR 63.1312 and 63.1323.

c. Each emissions units in this group is vented to a thermal oxidizer (formerly known as N004) that controls the emissions from the three Barex reactors, emissions units P009, P010 and P067 and acts as the control device for Group 1 batch process vents to achieve 90 weight percent reduction of HAP emissions for the batch cycle as required by 40 CFR 63.1322(a)(2).

c) Operational Restrictions

(1) Except as otherwise provided in 40 CFR, Part 63, Subpart JJJ, the permittee shall operate the thermal oxidizer (control device) such that the daily average firebox temperature remains above the minimum temperature previously established in accordance with 40 CFR 63.1324(f)(1) and 63.1334 as 1,350 degrees Fahrenheit. This value may be changed in the future as allowed by these provisions.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart JJJ]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate a temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall be installed in the firebox of the

incinerator, or ductwork immediately downstream of the firebox in a position before any heat exchange occurs.

All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

The permittee shall collect and record the following information:

a. continuous records of firebox temperature;

b. records of the batch cycle daily average temperature;

c. records specifying the times and durations of monitoring system breakdowns, repairs, calibration checks, zero (low-level) and high-level adjustments; and

d. records specifying any other periods of process or control device operations when monitors are not operating.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(2) Permittees of a batch process vent or aggregate batch vent stream using a vent system that contains bypass lines that could divert emissions away from the control device used to comply with 40 CFR 63.1322(a) shall comply with either 40 CFR 63.1324(e)(1) or (e)(2).

The permittee shall collect and record the information specified in either 40 CFR 63.1326(e)(3) or (e)(4), depending on the bypass flow monitoring option chose above.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 1 batch process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(4) A parameter monitoring excursion for batch process vents is defined in 40 CFR 63.1334(f)(2) and excused excursions are defined in 63.1334(g).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements for Group 1 batch process vents and the general reporting requirements listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336]. The time periods or deadlines specified in 40 CFR 63.1335 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(2) The permittee shall submit quarterly summary reports 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. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation: 0.12 lb VOC/hr from emissions unit P067

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-3369]

(2) The permittee shall comply with the applicable performance testing requirements listed in 40 CFR 63.7 and 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1); and 40 CFR, Part 63, Subparts A and JJJ]

g) Miscellaneous Requirements

(1) None.

3. P011, Barex #1 Strand Dryer

Operations, Property and/or Equipment Description:

Barex Plant #1 Strand Dryer and associated equipment, with cyclone. Dries strands from #1 Pasteline before transport to storage. Refer to overall Barex process description and flow diagram. Installation authorized by Barex plant PTI dated 4/17/74 (no reference #).

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20%, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	5.96 lbs PE/hr
c.	OAC rule 3745-21-07(M)	See b)(2)a.
d.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit is an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b. through b)(2)c., d)(2), e)(2) and f)(2)
e.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

f.	OAC rule 3745-31-05(A)(3)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).
g.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1), d)(3) through d)(6) and e)(1)

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 2 continuous process vent as defined in 40 CFR 63.1312.

c. The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the cyclone stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the cyclone controlling this emissions unit is the daily visible emission checks for the cyclone stack. If visible emissions are observed, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The cyclone shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) Cyclone operating parameters shall be re-verified as a result of any changes to the operating conditions of the cyclone or emissions unit. In addition to visible emissions checks of the cyclone stack, the permittee also has an inspection and maintenance program for the cyclone, including but not limited to conducting a semi-annual visual inspection of the cyclone components for proper operation. Based on the results of these inspections, repairs to the cyclone shall be made as needed. If the current CAM indicators and/or the cyclone inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the cyclone.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the cyclone stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents and the general reporting provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336]. The time periods or deadlines specified in 40 CFR 63.1335 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

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

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation: 5.96 lbs PE/hr

Applicable Compliance Method:If required, the permittee shall demonstrate compliance with the PE limitation above in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

g) Miscellaneous Requirements

(1) None.

4. P035, Acrylonitrile Plant #2 Reaction and Absorption Section

Operations, Property and/or Equipment Description:

The affected plant is the acrylonitrile unit, with absorber off-gas incinerator (AOGI). Acrylonitrile is produced by the vapor-phase catalytic reaction of ammonia, propylene, and air. This process produces the product acrylonitrile and co-products acetonitrile and hydrogen cyanide. This source refers to the reaction and product recovery (absorption) steps of this process. The subsequent recovery and purification steps for the product acrylonitrile and co-product HCN are addressed as emission unit P075. The subsequent recovery and purification steps for co-product acetonitrile are addressed as emission unit P074. Refer to the overall acrylonitrile plant process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
c.	OAC rule 3745-21-09(EE)	See b)(2)c.
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 60, Subpart Db [40 CFR 60.40b – 60.49b] [In accordance with 40 CFR 60.40b(a), this emissions unit is an affected source since it can be used as a steam generating unit (waste heat boiler), with heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million Btu/hr, subject to the emission limitations/control measures in this section.]	See b)(2)a. and b)(2)d.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR, Part 60, Subpart III [40 CFR 60.610 – 60.618]	See b)(2)b.
g.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	Table 3 to 40 CFR, Part 63, Subpart F – Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
h.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107] [In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) of 40 CFR 63.100.]	See b)(2)f., c)(2), c)(3), d)(6), d)(13) and e)(5)
i.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110(a), this emissions unit is an affected source, since process vents and in-process equipment is subject to 40 CFR 63.149 within a source subject to 40 CFR, Part 63, Subpart F.]	See b)(2)e., c)(4), d)(3), d)(5), d)(6), d)(8), d)(9), d)(14), e)(6) and f)(2)
j.	OAC rule 3745-31-05(A)(3) [PTI #03-9227, issued 11/20/03 (modification)]	6.0 lbs PE/hr, 26.3 tons PE/yr 5,736 lbs carbon monoxide (CO)/rolling, 24-hour period, 978.0 tons CO/yr, based upon a rolling, 365-day summation of daily emissions 6,614 lbs nitrogen oxides (NOx) per rolling, 24-hour period, 1,207.1 tons NOx/yr 2.5 lbs sulfur dioxide (SO2)/hr, 11.0 tons SO2/yr

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(A)(3) [PTI #03-9227, issued 11/20/03 (modification)] (Cont.)	130.8 lbs non-methane hydrocarbons (as carbon) (NMHC)/hr, 573.0 tons NMHC/yr See b)(2)c. through b)(2)e. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A); 40 CFR, Part 63, Subpart A; 40 CFR, Part 63, Subpart F; 40 CFR, Part 63, Subpart G; 40 CFR, Part 60, Subpart A; 40 CFR, Part 60, Subpart Db; 40 CFR, and 40 CFR, Part 60, Subpart III.
k.	OAC rule 3745-18-06(E)	The emission limitation based on this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).

(2) Additional Terms and Conditions

a. NOx emissions from the combustion of fuel in the AOGI shall be limited to 0.10 lb/mmBtu of actual heat input when fossil fuel alone is combusted. When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NOx emission limit is 645 ng/J (1.5 lb/million Btu of actual heat input). Compliance with these limits is based on a 30-day, rolling average as determined in accordance with sections d)(4)c., f)(1)g. and f)(1)h. for this emissions unit.

b. 40 CFR, Part 60, Subpart III regulations overlap with those of 40 CFR, Part 63, Subpart G. 40 CFR 63.110(d) addresses this overlap and states that equipment subject to 40 CFR, Part 60, Subpart III is required to comply only with the provisions of 40 CFR, Part 63, Subpart G.

c. Emissions from this emissions unit shall be controlled by the use of a closed process vent system that is vented to the AOGI that is designed and operated to comply with the less stringent of the following provisions:

i. reduce the VOC emissions vented to it with an efficiency of at least 98%, by weight; or

ii. emit VOC at a concentration less than 20 parts per million volume (ppmv), dry basis, corrected to 3% oxygen.

The vent stream from the absorber shall be introduced into the flame zone of the AOGI.

d. The AOGI is an incinerator used to control the closed vent system stream from the Acrylonitrile Plant #2 Reaction and Absorption Section (emissions unit P035) as required by air pollution rules and regulations. The AOGI also acts as a steam generating unit (waste heat boiler) and is, therefore, required to comply with the applicable portions of 40 CFR, Part 60, Subpart Db.

e. This emissions unit is not required to perform the group determination per 40 CFR 63.113(h) since it complies with 63.113(a)(1) and (a)(2).

f. This emissions unit does not generate process wastewater as defined in 40 CFR 63.101. The aqueous streams within this emissions unit are routed for recovery/recycle of organic constituents. As such, the point of determination as defined in 40 CFR 63.111 is the collection tank. Wastewater is generated upon discharge from this tank, and is covered in emissions unit P062.

c) Operational Restrictions

(1) The closed vent system shall be operated at all times when this emissions unit is in operation.

[OAC rule 3745-77-07(A)(1) and PTI #03-9227]

(2) The permittee shall monitor all heat exchanger systems used to cool process equipment by one of the methods specified in 63.104(b) or (c) unless one or more of the exemptions contained in 63.104(a)(1) through (6) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

(3) The permittee shall repair any heat exchanger leak as soon as practicable but not later than 45 calendar days after the permittee receives indication that a leak is present.

Once a leak has been repaired, the permittee shall confirm the heat exchange system has been repaired within 7 calendar days of the repair or start-up, whichever is later.

Delay of repair of the heat exchange systems for which leaks have been detected is allowed provided the conditions of 40 CFR 63.104(e) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

(4) The permittee shall establish a range of operating parameters for the AOGI that meet the requirements of 40 CFR, Part 63, Subpart G [40 CFR 63.116(c) and 40 CFR 63.114(e)].

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart G and PTI #03-9227]

(5) At all times including periods of startup, shutdown, and malfunction as defined by a plan developed in accordance with 63.6(e)(3), emissions unit P035 shall be operated in accordance with good air pollution control practices.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain equipment to continuously monitor and record CO and NOx emissions from this emissions unit in units of the applicable standard (i.e., lbs CO/rolling, 24-hour period, lbs NOx/rolling, 24-hour period, and lbs NOx/mmBtu, as a rolling, 30-day average). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR, Part 60.13. The monitoring data collected by the CO and NOx continuous emission monitors shall be used to demonstrate compliance with the CO and NOx tons per year limitations.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subpart A and PTI #03-9227]

(2) The permittee shall maintain a written quality assurance/quality control plans for the continuous CO and NOx monitoring systems designed to ensure continuous valid and representative readings of CO and NOx. The plans shall follow the requirements of 40 CFR, Part 60, Appendix F. The quality assurance/quality control plans and logbooks dedicated to the continuous CO and NOx monitoring systems must be kept on site and available for inspection during regular office hours.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Appendix F and PTI #03-9227]

(3) For any bypass line between the origin of the gas stream and the point where the gas stream reaches the process vent that could divert the gas stream directly to the atmosphere, the permittee shall either:

a. properly install, maintain, and operate a flow indicator at the entrance to any bypass line that could divert the gas stream to the atmosphere that takes a reading at least once every 15 minutes; or

b. secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G and PTI #03-9227]

(4) The permittee shall calculate and record each day the following for this emissions unit:

a. the rolling, 24-hour CO emissions, in pounds, and the rolling, 365-day CO emissions, in tons, calculated from the emissions data recorded by the CO emissions monitoring system in section d)(1) above;

b. the rolling, 24-hour NOx emissions, in pounds, calculated from the emissions data recorded by the NOx emissions monitoring system in section d)(1) above; and

c. the rolling 30-day average NOx emission rate, in lbs/mmBtu, calculated from the emissions data recorded by the NOx emissions monitoring system in section d)(1) above.

[OAC rule 3745-77-07(C)(1); and PTI #03-9227]

(5) The AOGI shall be equipped and operated with a temperature monitor equipped with continuous recording devices for the firebox of the AOGI.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G and PTI #03-9227]

(6) The permittee shall maintain records for the AOGI which comply with the requirements contained in 40 CFR, Part 60, Subparts A and Db; and 40 CFR, Part 63, Subparts A, F and G.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 60, Subparts A and Db; and 40 CFR, Part 63, Subparts A, F and G]

(7) The following information shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

b. the dates and description of any changes in the design specifications;

c. description of the parameter and/ or parameters monitored to ensure that the thermal oxidizer is operated and maintained in conformance with design, and an explanation of the reason for selecting such parameter or parameters;

d. periods when the closed vent system and thermal oxidizer is not operated as designed; and

e. dates of start-ups and shutdowns of the closed vent system and AOGI.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

(8) The permittee shall maintain the following:

a. continuous records of the AOGI firebox temperature; and

b. records of the daily AOGI firebox temperature for each operating day.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G and PTI #03-9227]

(9) The permittee shall keep the following up-to-date and readily accessible records for a period of five years:

a. For bypass lines complying with 40 CFR 63.114(d)(1), the permittee shall maintain hourly records of whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating.

b. For bypass lines complying with 40 CFR 63.114(d)(2), the permittee shall record that the monthly visual inspection of the seal or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for the lock-and-key type lock has been checked out and records of any car-seal that has broken.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(10) In addition to the requirements of CFR, Part 63 Subpart G, the permittee shall collect and record the following information each day and maintain the information at the facility for a period of five years: a log or record of operating times for the closed vent system, thermal oxidizer, and monitoring equipment.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

(11) The permittee shall maintain records of all data obtained by the CO and NOx monitoring systems including , but not limited to, parts per million CO and NOx on an instantaneous (fifteen minutes) basis, emissions of CO and NOx in units of the applicable standard in the appropriate averaging period (e.g. hourly, 3-hour, rolling average, daily, 30-day, rolling average, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments. The permittee shall keep records of the required NOx monitoring for a period of two years following the date of such record.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

(12) The permittee shall perform a weekly check, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1)]

(13) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(14) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(15) The permittee shall properly operate and maintain equipment to continuously monitor and record the combustion temperature within the AOGI during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature within the AOGI on a continuous basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature within the AOGI immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The daily average combustion temperature within the AOGI, for any day when the emissions unit is in operation, shall not be below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 365-day emission limitation for CO of 978 tons;

b. all exceedances of the rolling, 24-hour emission limitation for NOx of 6,614 pounds; and

c. all exceedances of the rolling, 24-hour emission limitation for CO of 5,736 pounds.

These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit the following reports on a quarterly basis:

a. all exceedances of all monitored parameters;

b. a log or record of operating time for the closed vent system, AOGI, and monitoring equipment;

c. periods of time when the closed vent system stream is diverted from the control device;

d. all periods of time when the AOGI was not operational; and

e. all periods of time when required monitoring data was not collected.

The permittee shall submit quarterly summaries of these records by January 31, April 30, July 31, and October 31.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

(4) Pursuant to OAC rules 3745-15-04 and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO and NOx values in excess of any applicable limitation(s) specified in the terms and conditions of this permit, in units of the applicable standard. These reports shall also contain the total CO and NOx for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Northwest District Office documenting any continuous CO and NOx monitoring system downtime while the emissions unit was on line (date, time, duration, and reason) along with any corrective action(s) taken. The permittee shall

provide the emissions unit's operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions.

If there were no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

The time periods or deadlines specified in this provision may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 60.19(f).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart A]

(5) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(6) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(7) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment (AOGI) during the operation of this emissions unit:

a. all days during which the daily average combustion temperature within the AOGI, when the emissions unit was in operation, was below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

b. Emission Limitation: 6.0 lbs PE/hr

Applicable Compliance Method: Compliance with the lbs/hr emission limitation has been demonstrated by past performance testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 5, of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

c. Emission Limitation: 26.3 tons PE/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

d. Emission Limitation: 5,736 lbs CO/rolling, 24-hour period

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly limitation above based upon the results of emission testing conducted in accordance with Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A, and the continuous CO emission monitoring and record keeping required in section d)(1) for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

e. Emission Limitation: 978.0 tons CO/yr, based upon a rolling, 365-day summation of daily emissions

Applicable Compliance Method: The permittee shall demonstrate compliance with the tons per rolling, 365-day limitation by the continuous CO emission monitoring and record keeping required in section d)(1) for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

f. Emission Limitation: 6,614 lbs NOx per rolling, 24-hour period

Applicable Compliance Method: The permittee shall demonstrate compliance with the rolling, 24-hour limitation above based upon the results of emission testing conducted in accordance with Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A, and the monitoring and record keeping required in section d)(1) for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

g. Emission Limitation: 0.10 lb NOx/mmBtu of actual heat input, when fossil fuel alone is combusted

Applicable Compliance Method: Compliance with the NOx standard of 0.10 lb/mmBtu of actual heat input shall be demonstrated through a 30-day rolling average of all the calculated hourly NOx emission rates for the previous 30 operating days during which fossil fuel alone was combusted, based on the results of the continuous emission monitor (CEM).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Db]

h. Emission Limitation: 1.5 lb NOx/mmBtu of actual heat input, when chemical byproduct/waste and fossil fuel are simultaneously combusted

Applicable Compliance Method: Compliance with the NOx standard of 1.5 lb/mmBtu of actual heat input shall be demonstrated through a 30-day rolling average of all the calculated hourly NOx emission rates for the previous 30 operating days during which chemical byproduct/waste and fossil fuel were simultaneously combusted, based on the results of the continuous emission monitor (CEM).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart Db]

i. Emission Limitation: 1,207.1 tons NOx/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

j. Emission Limitation: 2.5 lbs SO2/hr

Applicable Compliance Method: Compliance with the lbs/hr emission limitation has been demonstrated by past performance testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 6 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

k. Emission Limitation: 11.0 tons SO2/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

l. Emission Limitation: 130.8 lbs NMHC (as carbon)/hr

Compliance with the lbs/hr emission limitation has been demonstrated by past performance testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4, and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

m. Emission Limitation: 573.0 tons NMHC (as carbon)/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760, and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

n. Emission Limitation: 98% reduction efficiency for VOC, or 20 ppmvd VOC corrected to 3% oxygen

Applicable Compliance Method:

Compliance with the % reduction efficiency or ppmvd emission limitation has been demonstrated by past performance testing. Per Engineering Guide No. 16, periodic testing is no longer required. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission

testing in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternative test protocol.

[OAC rule 3745-77-07(C)(1) and PTI #03-9227]

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

a. The emission testing shall be conducted within 6 months after issuance of this permit and every 2.5 years thereafter.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission rates for NOx and CO.

c. The following stack test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NOx - Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A; and for CO - Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Northwest District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the applicable testing requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

g) Miscellaneous Requirements

(1) None.

5. P038, Catalyst Spray Dryer and #2 Calciner

Operations, Property and/or Equipment Description:

Spray Dryer system, with cyclones and venturi scrubber to control particulate emissions. #2 Calciner, dries/calcines metal powders, particulate emissions routed to venturi scrubber. Refer to overall Catalyst Plant process description and flow diagram. Installation authorized by PTI #03-785.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Exempt, pursuant to OAC rule 3745-17-07(A)(3)(i) [See b)(2)a.]
b.	OAC rule 3745-17-07(C)	See b)(2)a.
c.	OAC rule 3745-17-11(B)	30.99 lbs particulate emissions (PE)/hr
d.	OAC rule 3745-18-06(E)(2)	206.88 lbs sulfur dioxide (SO2)/hr [See b)(2)b.]
e.	OAC rule 3745-31-05 (PTI #03-785)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-11(B) and 3745-18-06(E).
f.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(7)

(2) Additional Terms and Conditions

a. Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible PE limitation for the stack serving this emissions unit in lieu of the 20% visible PE limitation specified in OAC rules 3745-17-07(A)(1)(a) and (A)(1)(b):

Except as otherwise provided in OAC rules 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from the stack serving this emissions unit any visible PE greater than 50% opacity, as a six-minute average. This limitation was established in a letter to the permittee dated October 21, 2005.

b. The process weight rate input for this emissions unit of 35,700 lbs/hr is greater than 1,000 pounds/hr. Therefore, pursuant to OAC rule 3745-18-06(E)(2), the allowable SO2 emissions are based on the following equation:

AER = 30 (P)^0.67

Where P is the process weight rate in tons per hour and AER is the allowable emission rate in pounds of sulfur dioxide per hour.

AER = 30 (17.85)^0.67 = 206.88 lbs SO2/hr

The actual SO2 emissions from this emissions unit are negligible because the combustion of natural gas is the only source of these emissions (the combustion of natural gas produces negligible amounts of SO2 emissions).

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 20 gallons per minute as a daily average.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate (in gallons per minute) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the flow rate on a once per shift basis, and shall determine a daily average scrubber water flow rate. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the minimum limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters at or above the minimum limits specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the flow rate immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The limit for the liquid flow rate is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted limit for the liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

(3) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

(4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the scrubber controlling this emissions unit is the daily average scrubber water flow rate. If the daily average scrubber water flow rate does not meet the minimum 20 gallons per minute, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting

requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The scrubber shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) Scrubber operating parameters shall be re-verified as a result of any changes to the operating conditions of the scrubber or emissions unit. In addition to scrubber water flow rate monitoring, the permittee also has an inspection and maintenance program for the scrubber, including but not limited to conducting a semi-annual visual inspection of the scrubber components for proper operation. Based on the results of these inspections, repairs to the scrubber shall be made as needed. If the current CAM indicators and/or the scrubber inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the scrubber.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(7) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. each period of time (start time and date, and end time and date) when the daily average liquid flow rate exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable limit, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C); and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible PE shall not exceed 50% opacity, as a 6-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

30.99 lbs PE/hr

Applicable Compliance Method:

If required, compliance with hourly PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

206.88 lbs SO2/hr

Applicable Compliance Method:

Compliance with the hourly allowable SO2 emission limitation shall be assumed as long as natural gas is the only fuel combusted in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

6. P039, Catalyst #1 Calciner

Operations, Property and/or Equipment Description:

#1 Calciner, dries/calcines metal powders, particulate emissions routed to cyclones and thermal oxidizer. Refer to overall Catalyst Plant process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	5.38 lbs PE/hr
c.	OAC rule 3745-18-06(E)(2)	39.36 lbs sulfur dioxide (SO2)/hr [See b)(2)a.]
d.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1), d)(3) through d)(6) and e)(1)

(2) Additional Terms and Conditions

a. The process weight rate input for this emissions unit of 3,000 lbs/hr is greater than 1,000 pounds/hr. Therefore, pursuant to OAC rule 3745-18-06(E)(2), the allowable SO2 emissions are based on the following equation:

AER = 30 (P)^0.67

Where P is the process weight rate in tons per hour and AER is the allowable

emission rate in pounds of sulfur dioxide per hour.

AER = 30 (1.5)^0.67 = 39.36 lbs SO2/hr

The actual SO2 emissions from this emissions unit are negligible because the combustion of natural gas is the only source of these emissions (the combustion of natural gas produces negligible amounts of SO2 emissions).

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

[OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the thermal oxidizer stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

(3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the cyclone controlling this emissions unit is the daily visible emission checks (the emissions from the cyclone enter the thermal oxidizer, and exit the thermal oxidizer stack). If visible emissions are observed, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The cyclone shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) Cyclone operating parameters shall be re-verified as a result of any changes to the operating conditions of the cyclone or emissions unit. In addition to visible emissions checks of the cyclone stack, the permittee also has an inspection and maintenance

program for the cyclone, including but not limited to conducting a semi-annual visual inspection of the cyclone components for proper operation.

Based on the results of these inspections, repairs to the cyclone shall be made as needed. If the current CAM indicators and/or the cyclone inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the cyclone.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the thermal oxidizer stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance with the visible PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation: 5.38 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the limitation above in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation: 39.36 lbs SO2/hr

Applicable Compliance Method: Compliance with the hourly allowable SO2 emission limitation shall be assumed as long as natural gas is the only fuel combusted in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

7. P043, Barex #1 Fines Dryer

Operations, Property and/or Equipment Description:

Barex Plant #1 Fines Dryer and associated equipment. Collects and dries fines from #1 Strand Dryer system and transports to strand storage. Refer to overall Barex process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20%, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	1.73 lbs PE/hr
c.	OAC rule 3745-21-07(M)	See b)(2)a.
d.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit is an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b., b)(2)c., d)(2), e)(2) and f)(2)
e.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-18-06(E)	See b)(2)d.
g.	OAC rule 3745-31-05 (PTI #03-1079, issued 6/17/81)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 2 process vent as defined in 40 CFR 63.1312.

c. The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

d. The process weight rate input for this emissions unit is less than 1,000 pounds/hr. Therefore, pursuant to OAC rule 3745-18-06(C), this emissions unit is exempt from any SO2 emission limitation.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents listed in 40 CFR, Part 63, Subpart JJJ. The time periods or deadlines specified in these requirements may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i) [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

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

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation: 1.73 lbs PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the limitation above in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

g) Miscellaneous Requirements

(1) None.

8. P048, Acetonitrile Reaction and Absorption Section

Operations, Property and/or Equipment Description:

The acetonitrile kill kettle (previously P048) and the acetonitrile batch still system (previously P015) are now incorporated into consolidated source P048, Acetonitrile Reaction and Absorption Section, with steam assisted flare. The kill kettle has been removed and a light ends column has been installed. Refer to the overall acetonitrile purification process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	None [See b)(2)a.]
b.	OAC rule 3745-17-11(B)	None [See b)(2)b.]
c.	OAC rule 3745-21-07(M)	See b)(2)c.
d.	40 CFR, Part 60, Subpart NNN [40 CFR 60.660 – 60.668]	See b)(2)d.
e.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107] [In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) of 40 CFR 63.100.]	See b)(2)i., c)(2), c)(3), d)(1) and e)(1)
f.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110(a), this emissions unit is an affected source, since process vents and in-process equipment is subject to 40 CFR 63.149 within a source subject to 40 CFR, Part 63, Subpart F.]	See b)(2)e., b)(2)h., d)(2), e)(2), e)(3) and f)(2)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 – 60.19
h.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	Table 3 to 40 CFR, Part 63, Subpart F – Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
i.	OAC rule 3745-31-05(A)(3) (PTI #03-13534, issued 4/10/01)	1.63 lbs of organic compounds (OC)/hr, 7.14 tons OC/yr See b)(2)f. and b)(2)g.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to an emission limitation from OAC rule 3745-17-11.

b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply.

Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14) does not include gaseous fuels used solely as fuel for the flare as a control device.

c. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

d. 40 CFR, Part 60, Subpart NNN regulations overlap with those of 40 CFR, Part 63, Subpart G. 40 CFR 63.110(d) addresses this overlap and states that equipment subject to 40 CFR, Part 60, Subpart NNN is required to comply only with the provisions of 40 CFR, Part 63, Subpart G.

e. This emissions unit includes Group 1 and Group 2 process vents as defined in 40 CFR 63.111. Therefore, the permittee shall control the combined streams as group 1, as described in 63.112(d)(3).

f. All emissions from this emissions unit, which includes the acetonitrile light ends column, digester and associated process condensers, shall be vented to a closed

process vent system. The closed process vent system shall meet the following control requirements:

i. All process vent emissions shall be combusted in a flare.

ii. The permittee shall operate the flare to meet the applicable conditions specified in 40 CFR, Part 63, Subpart A and G.

g. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subparts A, F and G.

h. Emissions from this emissions unit shall be routed to the acrylonitrile flare (emissions unit P075) through a closed vent system. The flare is the control option selected for control of a group 1 process vent as listed in 40 CFR 63.113.

i. This emissions unit does not generate process wastewater as defined in 40 CFR 63.101. Aqueous steams within this process are routed for recovery /recycling of organic constituents. As such, the point of determination as defined in 40 CFR 63.111 is the collection tank. Wastewater is generated upon discharge from this tank, and is covered in emissions unit P062, which is an insignificant emissions unit.

j. This emissions unit is vented to a flare that also controls the emissions from emissions unit P075. All operational restrictions, monitoring, record keeping, reporting and testing requirements for the flare are established in the terms and conditions for emissions unit P075 and are also applicable to emissions unit P048. Therefore, no additional monitoring, record keeping, reporting and testing requirements are necessary for the flare in this emissions unit.

c) Operational Restrictions

(1) At all times including periods of startup, shutdown, and malfunction as defined by a plan developed in accordance with 63.6(e)(3), emissions unit P048 shall be operated in accordance with good air pollution control practices.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart A]

(2) The permittee shall monitor all heat exchanger systems used to cool process equipment by one of the methods specified in 63.104(b) or (c) unless one or more of the exemptions contained in 63.104(a)(1) through (6) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

(3) The permittee shall repair any heat exchanger leak as soon as practicable but not later than 45 calendar days after the permittee receives indication that a leak is present. [40 CFR 63.104(d)(1)]

Once a leak has been repaired, the permittee shall confirm the heat exchange system has been repaired within 7 calendar days of the repair or start-up, whichever is later. [40 CFR 63.104(d)(2)]

Delay of repair of the heat exchange systems for which leaks have been detected is allowed provided the conditions of 40 CFR 63.104(e) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(2) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(3) The permittee shall submit semi-annual periodic reports in accordance with the provisions of 40 CFR, Part 63, Subparts G for this emissions unit. The time periods or deadlines specified in 40 CFR 63.152 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1), and 40 CFR, Part 63, Subparts G and H]

(4) The permittee shall submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.10(d)(5).

[OAC rule 3745-77-07(C)(1), and 40 CFR, Part 63, Subpart A]

f) Testing Requirements

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

a. Emission Limitation: 1.63 lbs OC/hr

Applicable Compliance Method: The flare emission limitation was developed by applying a 98 percent reduction efficiency for control with a flare to a maximum uncontrolled emission rate of 81.50 lbs OC/hr. Compliance shall be

demonstrated by ensuring the flare operates at the proper efficiency through the monitoring and record keeping established in the terms and conditions for emissions unit P075.

[OAC rule 3745-77-07(C)(1) and PTI #03-13534]

b. Emission Limitation: 7.14 tons OC/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760; and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13534]

(2) The permittee shall comply with the applicable testing requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

g) Miscellaneous Requirements

(1) None.

9. P050, Nitriles Loading Rack

Operations, Property and/or Equipment Description:

Product loading rack system for loading acrylonitrile and acetonitrile into tank cars or trucks, controlled by packed bed scrubbers.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.
b.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107] [In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2) and (b)(3) of 40 CFR 63.100]	See d)(2) and e)(2)
c.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.111, this emissions unit is an affected source, since it is a transfer rack subject to 40 CFR 63.149 within a source subject to 40 CFR, Part 63, Subpart F.]	See b)(2)b., c)(1), d)(1), d)(3), e)(1), e)(3) and f)(1)
d.	40 CFR 63.1 – 63.15	Table 3 to 40 CFR, Part 63, Subpart F - Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Subpart G shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 1 transfer rack as defined in 40 CFR 63.111. The 40 CFR, Part 63, Subpart G provisions for transfer racks are included in 40 CFR 63.126, 63.127, 63.128, 63.129, and 63.130.

c) Operational Restrictions

(1) The permittee has established (in April 2005) the minimum scrubber water flow rates for the acrylonitrile scrubber and the acetonitrile scrubber that meet the requirements of 40 CFR 63.127(e) as modified by the alternative monitoring protocol approved by U.S. EPA in a letter dated August 25, 2004 or any revisions to the alternative monitoring protocol subsequently approved by U.S. EPA.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart G]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the monitoring and record keeping requirements, for the acrylonitrile and acetonitrile scrubbers, contained in the alternative monitoring protocol approved by U.S. EPA in a letter dated August 25, 2004 or any revisions to the alternative monitoring protocol subsequently approved by U.S. EPA.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

e) Reporting Requirements

(1) The permittee shall submit reports as required by 40 CFR 63.152 and include the applicable information listed in 40 CFR 63.130 for transfer racks. The reports shall comply with the reporting requirements, for the acrylonitrile and acetonitrile scrubbers, contained in the alternative monitoring protocol approved by U.S. EPA in a letter dated August 25, 2004 or any revisions to the alternative monitoring protocol subsequently

approved by U.S. EPA. The time periods or deadlines specified in 40 CFR 63.152 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

(2) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

(3) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

g) Miscellaneous Requirements

(1) None.

10. P051, Nitriles Drum Loading System

Operations, Property and/or Equipment Description:

Equipment for loading acrylonitrile and acetonitrile into drums; controlled by carbon adsorption.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

11. P052, HCN Loading Rack

Operations, Property and/or Equipment Description:

Rack for loading HCN, controlled by vapor balance with the HCN tanks, flare scrubber, and flare.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.
b.	40 CFR, Part 63, Subpart YY [40 CFR 63.1100 – 63.1114] [In accordance with 40 CFR 63.1103(g), this emissions unit is an affected source, since it is a transfer rack that contains or contacts cyanide chemicals that are associated with the cyanide chemicals manufacturing process unit.]	See b)(2)b., d)(1), e)(1) and f)(1)
c.	40 CFR, Part 63, Subpart A	The following provisions of subpart A of this part (General Provisions), 40 CFR 63.1 through 63.5, and 63.12 through 63.15, apply to permittees with affected sources subject to this subpart.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. The permittee shall comply with the applicable requirements listed in 40 CFR, Part 63, Subpart YY for Cyanide Chemicals Manufacturing [See 40 CFR 63.1100 – 63.1114].

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements and the general record keeping provisions listed in 40 CFR, Part 63, Subpart YY [See 40 CFR 63.1100 – 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart YY. The time periods or deadlines specified in these requirements may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i) [See 40 CFR 63.1100 – 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

f) Testing Requirements

(1) The permittee shall comply with the applicable testing requirements listed in 40 CFR, Part 63, Subpart YY [See 40 CFR 63.1100 – 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

g) Miscellaneous Requirements

(1) None.

12. P065, Barex #2 Strand Dryer

Operations, Property and/or Equipment Description:

Barex Plant #2 Strand Dryer and associated equipment, with cyclone. Dries strands from #2 pasteline before transport to storage. Refer to overall Barex process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20%, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-21-07(M)	See b)(2)a.
d.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit is an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b., b)(2)c., d)(2), e)(2) and f)(2)

e.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
f.	OAC rule 3745-31-05(A)(3) (PTI #03-9718, issued 8/14/96)	5.20 lbs PE/hr 3.40 lbs particulate matter less than 10 microns in size (PM10)/hr 3.8 lbs acrylonitrile/hr 3.5 lbs methyl acrylate/hr 4.8 lbs volatile organic compounds (VOC)/hr as carbon The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A). See b)(2)d.
g.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1), d)(3) through d)(6) and e)(1)

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 2 process vent as defined in 40 CFR 63.1312.

c. The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

d. This emissions unit shall be controlled with a cyclone capable of achieving greater than 95% control efficiency for particulate emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the cyclone stack serving this emissions unit. The presence or absence of any visible emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

(3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for the cyclone controlling this emissions unit is the daily visible emission checks for the cyclone stack. If visible emissions are observed, the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below.

The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The cyclone shall not be configured to have bypass capability.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(4) Cyclone operating parameters shall be re-verified as a result of any changes to the operating conditions of the cyclone or emissions unit. In addition to visible emissions checks of the cyclone stack, the permittee also has an inspection and maintenance program for the cyclone, including but not limited to conducting a semi-annual visual inspection of the cyclone components for proper operation. Based on the results of these inspections, repairs to the cyclone shall be made as needed. If the current CAM indicators and/or the cyclone inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(5) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the cyclone.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the Ohio EPA, Northwest District Office, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the cyclone stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

(2) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents and the general reporting provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336]. The time periods or deadlines specified in 40 CFR 63.1335 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

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

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

b. Emission Limitation: 5.20 lbs PE/hr

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

c. Emission Limitation: 3.40 lbs PM10/hr

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 of 40 CFR, Part 60, Appendix A, and Methods 201/201A of 40 CFR, Part 51, Appendix M.

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

d. Emission Limitation: 3.8 lbs acrylonitrile/hr

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

e. Emission Limitation: 3.5 lbs methyl acrylate/hr

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

f. Emission Limitation: 4.8 lbs VOC/hr as carbon

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-9718]

(2) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

g) Miscellaneous Requirements

(1) None.

13. P068, Barex #2 Pasteline

Operations, Property and/or Equipment Description:

Barex Plant #2 Pasteline and associated equipment, with scrubber. Combines Barex reactor batches, coagulates latex to make strands, washes strands. Refer to overall Barex process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-07(M)	See b)(2)a.
b.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit is an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)b., b)(2)c., d)(2), e)(3) and f)(2)
c.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
d.	OAC rule 3745-31-05(A)(3) [PTI #03-3369, issued 1/11/91 (modification)]	0.9 lb volatile organic compounds (VOC)/hr See b)(2)d.

(2) Additional Terms and Conditions

a. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

b. This emissions unit is a Group 2 continuous process vent as defined in 40 CFR 63.1312.

c. The permittee shall comply with the applicable emission standards listed in 40 CFR, Part 63, Subpart JJJ for Group 2 continuous process vents (See 40 CFR 63.1310 – 63.1336).

d. The emissions from this emissions unit shall be vented to the wet scrubber at all times the emissions unit is in operation.

[OAC rule 3745-77-07(C)(1)]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable scrubber liquid flow rate, that shall be maintained in order to demonstrate compliance, shall not be less than 10 gallons per minute as a daily average.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the scrubber liquid flow rate (in gallons per minute) during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the flow rate on a once per shift basis, and shall determine a daily average scrubber water flow rate. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the minimum limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters at or above the minimum limits specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the flow rate immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The limit for the liquid flow rate is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office. The permittee may request revisions to the permitted limit for the liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements for Group 2 continuous process vents and the general record keeping provisions listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. each period of time (start time and date, and end time and date) when the daily average liquid flow rate exceeded the applicable limit contained in this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the scrubber;

c. each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the liquid flow rate into compliance with the acceptable limit, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C); and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable reporting requirements for Group 2 continuous process vents listed in 40 CFR, Part 63, Subpart JJJ. The time periods or deadlines specified in these requirements may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i) [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

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

a. Emission Limitation: 0.9 lb VOC/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #03-3369]

(2) The permittee shall comply with the applicable performance testing requirements for continuous process vents listed in 40 CFR, Part 63, Subpart JJJ [See 40 CFR 63.1310 – 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

g) Miscellaneous Requirements

(1) None.

14. P074, Acetonitrile Recovery and Purification Section

Operations, Property and/or Equipment Description:

Acetonitrile recovery and purification section, includes the aceto purification column and drying column previously permitted as P012 and P074. Refer to overall Acetonitrile process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	None [See b)(2)a.]
b.	OAC rule 3745-17-11(B)	None [See b)(2)b.]
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 60, Subpart NNN [40 CFR 60.660 – 60.668]	See b)(2)d.
e.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	Table 3 to 40 CFR, Part 63, Subpart F – Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply. Table 1A to 40 CFR, Part 63, Subpart G – Applicability of General Provisions to Subpart G shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
f.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107] [In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) of 40 CFR 63.100.]	See c)(3), c)(4), d)(1) and e)(1)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153] [In accordance with 40 CFR 63.110(a), this emissions unit is an affected source, since process vents and in-process equipment is subject to 40 CFR 63.149 within a source subject to 40 CFR, Part 63, Subpart F.]	See b)(2)e., b)(2)g., b)(2)h., d)(2), e)(2), e)(3) and f)(2)
h.	OAC rule 3745-21-07(M)	See b)(2)c.
i.	OAC rule 3745-31-05(A)(3) (PTI #03-13534, issued 4/10/01)	3.28 lbs organic compounds (OC)/hr, 14.37 tons OC/yr See b)(2)f. and b)(2)i.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

b. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14) does not include gaseous fuels used solely as fuel for the flare as a control device.

c. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

d. 40 CFR, Part 60, Subpart NNN regulations overlap with those of 40 CFR, Part 63, Subpart G. 40 CFR 63.110(d) addresses this overlap and states that equipment subject to 40 CFR, Part 60, Subpart NNN is required to comply only with the provisions of 40 CFR, Part 63, Subpart G.

e. Emissions from emissions unit P074: recovery and purification section which includes the acetonitrile drying column, acetonitrile product column and associated process condensers shall be vented to a closed process vent system. The closed process vent system shall meet the following control requirements:

i. all process vent emissions shall be combusted in a flare.

The permittee shall operate the flare to meet the applicable conditions specified in 40 CFR, Part 63, Subpart G.

f. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subparts A, F and G.

g. This emissions unit is not required to perform group determination per 40 CFR 63.113(h) since it complies with 63.113(a)(1) and (a)(2).

h. This emissions unit does not generate wastewater as defined in 40 CFR 63.101. The aqueous streams within this emissions unit are routed for recovery/recycle of organic constituents. As such, the point of determination as defined in 40 CFR 63.111 is the collection tank. Wastewater is generated upon discharge from this tank, and is covered in emissions unit P062.

i. This emissions unit is vented to a flare that also controls the emissions from emissions unit P075. All operational restrictions, monitoring, record keeping, reporting and testing requirements for the flare are established in the terms and conditions for emissions unit P075 and are also applicable to emissions unit P074. Therefore, no additional monitoring, record keeping, reporting and testing requirements are necessary for the flare in this emissions unit.

c) Operational Restrictions

(1) The permittee shall operate the closed vent system at all times when emissions may be vented to it.

[OAC rule 3745-77-07(A)(1) and PTI #03-13534]

(2) At all times including periods of startup, shutdown, and malfunction as defined by a plan developed in accordance with 63.6(e)(3), emissions unit P074 shall be operated in accordance with good air pollution control practices.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart A and PTI #03-13534]

(3) The permittee shall monitor all heat exchanger systems used to cool process equipment by one of the methods specified in 63.104(b) or (c) unless one or more of the exemptions contained in 63.104(a)(1) through (6) are met.

[OAC rule 3745-77-07(A)(1); 40 CFR, Part 63, Subpart F and PTI #03-13534]]

(4) The permittee shall repair any heat exchanger leak as soon as practicable but not later than 45 calendar days after the permittee receives indication that a leak is present.

Once a leak has been repaired, the permittee shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or start-up, whichever is later.

Delay of repair of the heat exchange systems for which leaks have been detected is allowed provided the conditions of 40 CFR 63.104(e) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart F and PTI #03-13534]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G and PTI #03-13534]

e) Reporting Requirements

(1) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart F and PTI #03-13534]

(2) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G and PTI #03-13534]

(3) The permittee shall submit initial notifications in accordance with the provisions of 40 CFR, Part 63, Subpart G for this emissions unit.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G; and PTI #03-13534]

(4) The permittee shall submit start-up, shutdown, and malfunction reports in accordance with 40 CFR 63.10(d)(5).

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart A]

f) Testing Requirements

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

a. Emission Limitation: 3.28 lbs OC/hr

Applicable Compliance Method: The flare emission limitation was developed by applying a 98 percent reduction efficiency for control with a flare to a maximum uncontrolled emission rate of 164.0 lbs OC/hr. Compliance shall be demonstrated by ensuring the flare operates at the proper efficiency through the monitoring and record keeping established in the terms and conditions for emissions unit P075.

Emission Limitation: 14.37 tons OC/yr

Applicable Compliance Method: The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760; and then dividing by 2,000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13534]

(2) The permittee shall comply with the applicable testing requirements listed in 40 CFR, Part 63, Subpart G [See 40 CFR 63.110 – 63.153].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart G]

g) Miscellaneous Requirements

(1) None.

15. P075, Acrylonitrile Plant #2 Recovery & Purification Section

Operations, Property and/or Equipment Description:

Acrylonitrile Plant No. 2 Recovery and Purification Section

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) [PTI #P0103909, issued 11/15/11, modification]	544.80 lbs of carbon monoxide (CO)/day; 6,016.80 lbs of nitrogen oxides (NO_x)/day; 72.00 lbs of sulfur dioxide (SO_2)/day and 13.23 tons per year (tpy) of SO_2 [See b)(2)g.]; 3,069.60 lbs of volatile organic compounds (VOC)/day [See b)(2)d.]; 105.60 lbs of particulate matter less than 10 microns in size (PM_{10})/day [See b)(2)h.]. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and OAC rule 3745-31-05(D); 40 CFR, Part 63, Subpart A; 40 CFR, Part 63, Subpart F; 40 CFR, Part 63, Subpart G; and 40 CFR, Part 60, Subpart NNN.
b.	OAC rule 3745-31-05(D) [PTI #P0103909, issued 11/15/11, modification]	332.44 tons of NOx per rolling 12-month period; 18.35 tons of CO per rolling 12-month period;

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		38.64 tons of VOC per rolling 12-month period [See b)(2)d.]; 6.66 tons of PM10 per rolling 12-month period [see b)(2)h.] See b)(2)f.
c.	OAC rule 3745-21-07(M)	See b)(2)i.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average except as provided by rule
e.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	40 CFR, Part 60, Subpart NNN	See b)(2)b.
h.	40 CFR, Part 63, Subpart F	See b)(2)a.
i.	40 CFR, Part 63, Subpart G	See b)(2)a. and b)(2)c.
j.	40 CFR, Part 63, Subpart YY	See b)(2)j.

(2) Additional Terms and Conditions

a. The permittee shall comply with all applicable standards in 40 CFR, Part 63, Subparts A, F and G for this emissions unit.

b. 40 CFR, Part 60, Subpart NNN regulations overlap with those of 40 CFR, Part 63, Subpart G. 40 CFR Part 63.110(d) addresses this overlap and states that equipment subject to 40 CFR, Part 60, Subpart NNN is required to comply only with the provisions of 40 CFR, Part 63, Subpart G.

c. Pursuant to 40 CFR 63.113(h), the permittee is not required to make a group determination as described in 40 CFR 63.115 because it complies with 40 CFR 63.113(a)(1) and (a)(2).

d. Emissions from the acrylonitrile plant #2 recovery and purification section shall be controlled by the use of a closed process vent system. The closed vent system stream will be required to meet at least one of the following criteria at all times:

i. control closed vent system emissions with a flare; or

ii. reduce closed vent system emissions of total organic compounds (TOC) less methane and ethane by 98% or to a concentration less than 20 ppmv on a dry basis corrected to 3% oxygen.

e. The acrylonitrile flare also controls emissions from emissions units P048, P052, P074, T129, and T084. The operational restrictions, monitoring, recordkeeping and reporting, and testing requirements related to the flare are included with this emissions unit (P075).

f. Emissions from the flare and/or thermal oxidizer controlling emissions unit P075 shall not exceed the following:

i. 332.44 tons of NOx per rolling 12-month period;

ii. 18.35 tons of CO per rolling 12-month period;

iii. 38.64 tons of VOC per rolling 12-month period;

iv. 6.66 tons of PM_{10} per rolling 12-month period.

The emission limitations per rolling 12-month period are federally enforceable limitations based on the operational restrictions (a) limiting the amount of hydrogen cyanide (HCN) routed to the flare and the thermal oxidizer for control [see c)(2)g. and c)(3)b.]; and (b) limiting the hours the thermal oxidizer can operate in an idle mode [see c)(3)c.]. The federally enforceable emission limitations are being established for purposes of avoiding "Prevention of Significant Deterioration" (PSD) applicability.

g. SO_2 emissions are based on the maximum amount of SO_2 used in the process and are the same whether emitted from the flare or the thermal oxidizer.

h. All emissions of particulate matter are PM_{10}.

i. This emissions unit is not subject to the requirements of the rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

j. 40 CFR, Part 63, Subpart YY regulations overlap with those of 40 CFR, Part 63, Subpart G. 40 CFR 63.1100(g)(2)(i) addresses this overlap and states that equipment subject to 40 CFR, Part 63, Subpart YY is required to comply only with the provisions of 40 CFR, Part 63, Subpart G.

c) Operational Restrictions

(1) Process vent operational restrictions:

The closed vent system shall be operated at all times when emissions may be vented to it.

[OAC rule 3745-77-07(A)(1) and PTI #P0103909]

(2) Flare operational restrictions [40 CFR 63.11]:

a. The flare shall be designed for and operated with no visible emissions as determined by Method 22 of 40 CFR, Part 60, Appendix A, except for periods not to exceed a total of five minutes during any 120 consecutive minutes.

b. The flare shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times. If an electric arc ignition system is employed, the arcing shall pulse continually.

c. The flare shall be steam-assisted.

d. The net heating value of the gas being combusted in the flare, as determined by the method specified in 40 CFR 63.11(b)(6)(ii) shall be 300 Btu/scf or greater.

e. The flare shall be designed and operated with an actual exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i) except as provided in 40 CFR 63.11(b)(7)(ii) and 40 CFR 63.11(b)(7)(iii).

f. The permittee shall ensure the flare is operated and maintained in conformance with its design.

g. The amount of HCN routed to the flare shall not exceed 3,317,218 lbs per rolling 12-month period. The permittee has existing process data to generate the rolling 12-month summation of HCN routed to the flare, therefore it will not be necessary to establish operational restrictions for the first 12 months of operation following issuance of this permit (see section c)(4)).

[OAC rule 3745-77-07(A)(1) and PTI #P0103909]

(3) Thermal oxidizer restrictions:

a. The permittee shall establish a range of operating parameters that meet the requirements of 40 CFR, Part 63, Subpart G, as determined from performance testing.

b. The amount of HCN routed to the thermal oxidizer shall not exceed 15,298,000 lbs per rolling 12-month period minus the amount of HCN routed to the flare per rolling 12-month period. The permittee has existing process data to generate the rolling 12-month summation of HCN routed to the thermal oxidizer, therefore it will not be necessary to establish operational restrictions for the first 12 months of operation following issuance of this permit (see section c)(4)).

c. The thermal oxidizer shall not exceed 7,884 hours of operation per rolling 12-month period in an idle mode. An idle mode is defined as periods when the thermal oxidizer is not oxidizing significant amounts of process materials, and is kept online at operational temperatures while fueled by natural gas. The permittee has existing records to generate the rolling 12-month summation of the hours of operation of the thermal oxidizer in the idle mode, therefore it will not be

necessary to establish operational restrictions for the first 12 months of operation following the issuance of this permit.

[OAC rule 3745-77-07(A)(1) and PTI #P0103909]

(4) The total amount of HCN routed to the flare and thermal oxidizer shall not exceed 15,298,000 lbs per rolling 12-month period.

[OAC rule 3745-77-07(A)(1) and PTI #P0103909]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall keep up-to-date records of the following information:

a. flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during any compliance determinations.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(2) Monitoring requirements for this emissions unit:

a. Monitoring requirements associated with federally enforceable limitations/restrictions:

i. The permittee shall properly install, operate, and maintain equipment to monitor the HCN flow rate (in pounds) routed to the flare. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

ii. The permittee shall properly install, operate, and maintain equipment to monitor the HCN flow rate (in pounds) routed to the thermal oxidizer. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

b. Flare monitoring requirements:

i. The flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame. If an electric arc ignition system is employed, the arcing shall be monitored to detect any failure [40 CFR 63.114(a)(2)].

ii. The permittee shall perform weekly checks, when the emissions unit is in operation, and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit, including the flare. The presence or absence of any visible emissions

shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

(a) the location and color of the emissions;

(b) whether the emissions are representative of normal operations;

(c) if the emissions are not representative of normal operations, the cause of the abnormal emissions;

(d) the total duration of any visible emissions incident; and

(e) any corrective actions taken to eliminate the visible emissions.

If, during any weekly check, the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 10 minutes in accordance with the methods and procedures specified in 40 CFR, Part 60, Appendix A, Method 22 and record the results in an operations log.

c. Thermal oxidizer monitoring requirements:

i. The permittee shall operate and monitor the thermal oxidizer in accordance with the requirements of 40 CFR, Part 63, Subpart G. The permittee shall operate continuous temperature monitoring and recording devices for the thermal oxidizer. [40 CFR 63.114(a)(1)]

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G; and PTI #P0103909]

(3) Recordkeeping requirements for this emissions unit:

a. The permittee shall comply with the recordkeeping requirements contained in 40 CFR, Part 63, Subpart G.

b. The following information shall be recorded for the flare and thermal oxidizer and kept in a readily accessible location:

i. detailed schematics, design specifications, and piping and instrumentation diagram;

ii. the dates and descriptions of any changes in the design specification;

iii. a description of the parameter(s) monitored to ensure that the flare and thermal oxidizer are operated and maintained in conformance with their design, and an explanation of the reason for selecting such parameter(s);

iv. periods when the closed vent system, flare, and thermal oxidizer are not operated as designed; and

v. dates of start-ups and shutdowns of the closed vent system, flare, and thermal oxidizer.

c. The permittee shall maintain records that document operating time for the closed vent system, flare and thermal oxidizer, and monitoring equipment. The information shall be maintained in the company's files for a period of five years.

d. The permittee shall collect and record the following records associated with federally enforceable limitations/restrictions each day:

i. the HCN flow rate to the flare, in lbs;

ii. the rolling 12-month summation of the HCN flow rate to the flare, in lbs;

iii. the HCN flow rate to the thermal oxidizer, in lbs;

iv. the rolling 12-month summation of the HCN flow rate to the thermal oxidizer;

v. the number of hours the thermal oxidizer operated in an idle mode (idle mode is defined in c)(3)c.);

vi. the rolling 12-month summation of the idle mode operating hours for the thermal oxidizer;

vii. the natural gas feed to the thermal oxidizer operated in an idle mode, in scf, (idle mode is defined in c)(3)c.);

viii. the rolling 12-month summation of the natural gas feed to the thermal oxidizer operated in an idle mode, in scf;

ix. the NO_x, CO, VOC, and PM_{10} emissions from the flare and thermal oxidizer calculated in accordance with the following:

Ei = Fi + TOi

Where:

Ei = Emissions for pollutant i

Fi = Emissions of pollutant i from flare

TOi = Emissions of pollutant i from thermal oxidizer

for i = NOx

F = (flow rate HCN, in lbs) x (HCN heat content) x (NO_x emission factor)

= [d)(3)d.i. x 10,220 Btu/lb x 4.088 lbs of NO_x/mmBtu]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (NO_x emission factor) + (operating hours in idle mode) x (maximum idle mode lb/hr emissions)

= [d)(3)d.iii. x 10,220 Btu/lb x 4.088 lb of NO_x/mmBtu] + [d)(3)d.v. x (3.26 lbs of NO_x/hr]

for i = PM_{10}

F = (flow rate HCN, in lbs) x (HCN heat content) x (PM_{10} emission factor)

= [d)(3)d.i. x 10,220 Btu/lb x 0.072 lbs of PM_{10}/mmBtu]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (PM_{10} emission factor) + (natural gas feed in idle mode, in scf) x (AP-42 emission factor)

= [d)(3)d.iii. x 10,220 Btu/lb x 0.072 lb of PM_{10}/mmBtu] + [d)(3)d.vii. x 7.6 lbs of PM_{10}/mmscf]

for i = CO

F = (flow rate HCN, in lbs) x (HCN heat content) x (CO emission factor)

= [d(3)d.i. x 10,220 Btu/lb x 0.37 lb of CO/mmBtu]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (CO emission factor) + (natural gas feed in idle mode, in scf) x (AP-42 emission factor)

= [d)(3)d.iii. x 10,220 Btu/lb x 0.011 lb of CO/mmBtu] + [d)(3)d.vii. x 84 lbs of CO/mmscf]

for i = VOC

F = (flow rate HCN, in lbs) x (HCN heat content) x (VOC emission factor) + (2% x flow rate HCN, in lbs)

= [d)(3)d.i. x 10,220 Btu/lb x 0.128 lb of VOC/mmBtu] + [0.02 lb of VOC/lbs of HCN flow x d)(3)d.i.]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (VOC emission factor) + (operating hours in idle mode) x (maximum idle mode lb/hr emissions)

= [d)(3)d.iii. x 10,220 Btu/lb x 0.0036 lb of VOC/mmBtu] + [d)(3)d.v. x (0.78 lb of VOC/hr]

Emission factors and maximum lb/hr emissions are based on either AP-42 or stack testing performed on 11/11/04 and 11/12/04.

x. The rolling 12-month summation for NO_x, PM_{10}, CO, and VOC emissions.

e. Flare recordkeeping requirements:

i. The permittee shall comply with the flare recordkeeping requirements contained in 40 CFR, Part 60, Subpart A and 40 CFR, Part 63, Subpart G.

f. Thermal oxidizer recordkeeping requirements:

i. The permittee shall comply with the recordkeeping requirements contained in 40 CFR, Part 63, Subpart G.

ii. The permittee shall maintain continuous records of the thermal oxidizer firebox temperature in accordance with the 40 CFR, Part 63, Subpart G.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G; and PTI #P0103909]

(4) The permittee shall properly operate and maintain equipment to continuously monitor and record the combustion temperature within the thermal oxidizer during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature within the thermal oxidizer on a continuous basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature within the thermal oxidizer immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The daily average combustion temperature within the thermal oxidizer, for any day when the emissions unit is in operation, shall not be below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

This value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit semiannual reports to the Ohio EPA, Northwest District Office to satisfy the semiannual reporting requirements of 40 CFR 63.182(D)(1). The time periods or deadlines specified in 40 CFR 63.182 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G; and PTI #P0103909]

(2) The permittee shall comply with the reporting requirements contained in 40 CFR, Part 63, Subpart G. The time periods of deadlines specified in 40 CFR 63.152 may be changed by mutual agreement between the permittee and the Ohio EPA in accordance with 40 CFR 63.9(i).

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart G; and PTI #P0103909]

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

a. all exceedances of all monitored parameters;

b. a log of the operating time for the closed vent system, flare, and thermal oxidizer;

c. all periods of time when the flare and/or thermal oxidizer was not operational; and

d. all periods of time when the required monitoring data was not collected.

The permittee shall submit the quarterly reports by January 31, April 30, July 31, and October 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(4) The permittee shall submit the semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks, including the flare, serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Northwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(5) The permittee shall submit quarterly reports which include all visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR, Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(6) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month limitations for (a) the amount of HCN that can be routed to the flare; (b) the amount of HCN that can be routed to the thermal oxidizer; and (c) the number of hours the thermal oxidizer can operate in idle mode. These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(7) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling 12-month emission limitations for NO_x, PM_{10}, CO, and VOC. These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(8) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily emission limitations for PM_{10}, NO_x, SO_2, CO, and VOC as specified in section b)(1). These reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

(9) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment (thermal oxidizer) during the operation of this emissions unit:

a. all days during which the daily average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

i. 544.80 lbs of CO/day.

ii. 6,016.80 lbs of NOx/day.

iii. 3,069.60 lbs of VOC/day.

iv. 105.60 lbs of PM_{10}/day.

Applicable Compliance Method: Compliance shall be demonstrated in accordance with the monitoring and recordkeeping requirements specified in term d)(3)d.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

b. Emission Limitations:

i. 332.44 tons of NO_x per rolling 12-month period.

ii. 18.35 tons of CO per rolling 12-month period.

iii. 38.64 tons of VOC per rolling 12-month period.

iv. 6.66 tons of PM_{10} per rolling 12-month period

Applicable Compliance Method: Compliance shall be demonstrated in accordance with the monitoring and recordkeeping requirements specified in term d)(3)d.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

c. Emission Limitations: 72.00 lbs of SO_2/day and 13.23 tons of SO_2/year.

Applicable Compliance Method: The permittee shall demonstrate compliance with the daily limitation based upon documentation of the sulfur contents of the raw material feeds to the process.

The annual emission limitation was developed by multiplying the hourly emission limitation by 8,760 hours per year and dividing by 2,000 lbs. Therefore, provided

compliance is shown with the hourly limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

d. Emission Limitation: The amount of HCN routed to the flare shall not exceed 3,317,218 lbs per rolling 12-month period.

Applicable Compliance Method: Compliance shall be demonstrated in accordance with the monitoring and recordkeeping requirements specified in term d)(3)d.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

e. Emission Limitation: Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average except as provided by rule

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

f. Emission Limitation: The amount of HCN routed to the thermal oxidizer shall not exceed 15,298,000 lbs per rolling 12-month period minus the amount of HCN routed to the flare per rolling 12-month period.

Applicable Compliance Method: Compliance shall be demonstrated in accordance with the monitoring and recordkeeping requirements specified in term d)(3)d.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

g. Emission Limitation: The thermal oxidizer shall not exceed 7,884 hours of operation per rolling 12-month period in an idle mode.

Applicable Compliance Method: Compliance shall be demonstrated in accordance with the monitoring and recordkeeping requirements specified in term d)(3)d.

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

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

a. The emission testing shall be conducted within 6 months after issuance of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the mass emission rates for PM_{10}, SO_2 and NO_x. Upon receipt and review of test results for these pollutants, Ohio EPA will determine whether additional emission

testing is required during the five year permit term in accordance with Engineering Guide No. 16.

c. The following stack test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

PM_{10}: Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M

SO_2: Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A

NO_x: Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northwest District Office.

Not later than 30 days prior to the proposed test dates(s), the permittee shall submit an "Intent to Test" notification to the Northwest District Office. The Intent to Test notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northwest District Office's refusal to accept the results of the emissions test(s).

Personnel from the Northwest District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1) and PTI #P0103909]

g) Miscellaneous Requirements

(1) None.

15. P078, Barex Dust Collection System

Operations, Property and/or Equipment Description:

Dust collection system for the Barex plastic resin extrusion and packaging process, with dust collector. Refer to Barex process description and flow diagram.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #P0109073, modification issued 12/2/11)	0.31 lb particulate emissions (PE)/hr 1.36 tons PE/yr See b)(2)a.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(1)	See b)(2)b.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) have been determined to be the use of a dust collector with a control efficiency for PE of 99.995% and compliance with the terms and conditions of this permit.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective action taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI #P0109073]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

[OAC rule 3745-77-07(C)(1) and PTI #P0109073]

f) Testing Requirements

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

a. Emission Limitation: 0.31 lb PE/hr

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation pursuant to Methods 1 – 5 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0109073]

b. Emission Limitation: 1.36 tons PE/yr

Applicable Compliance Method: The annual emission limitation was established by multiplying the lb/hr limitation by the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown

with the lb/hr limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0109073]

c. Emission Limitation: Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method: If required, compliance with the visible emission limitation above shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and PTI #P0109073]

g) Miscellaneous Requirements

(1) None.

16. P080, Cooling Tower #1 – (CAPU)

Operations, Property and/or Equipment Description:

Cooling Tower #1 – 18,000 gallons per minute

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	98.8 lbs PE/hr
c.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	Table 3 to 40 CFR, Part 63, Subpart F – Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
d.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107] [In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) of 40 CFR 63.100.]	See b)(2)a., c)(1), c)(2), d)(3) and e)(2)

(2) Additional Terms and Conditions

a. The applicable portions of 40 CFR, Part 63, Subpart F that apply to this cooling tower are listed in 40 CFR 63.104, Heat exchange system requirements.

c) Operational Restrictions

(1) The permittee shall monitor all heat exchanger systems used to cool process equipment by one of the methods specified in 40 CFR 63.104(b) or (c) unless one or more of the exemptions contained in 40 CFR 63.104(a)(1) through (6) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

(2) If a leak is detected, the permittee shall comply with the requirements of 40 CFR 63.104(d), including the repair of any heat exchanger leak as soon as practicable but not later than 45 calendar days after the permittee receives indication that a leak is present.

Once a leak has been repaired, the permittee shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later.

Delay of repair of the heat exchange systems for which leaks have been detected is allowed provided the conditions of 40 CFR 63.104(e) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the total dissolved solids concentration (mg/l) of the cooling water on a weekly basis using a conductivity meter or other U.S. EPA-approved test procedures.

[OAC rule 3745-77-07(C)(1)]

(2) Each week, the permittee shall calculate and record the PE rate, in pounds/hr, using the methodology outlined in section f)(1)b.for this emissions unit.

[OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports, in accordance with the Standard Terms and Conditions of this permit, that identify all exceedances of the hourly PE limitation of 98.8 pounds per hour.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

f) Testing Requirements

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

a. Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by OAC rule 3745-17-07(A).

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation: 98.8 lbs PE/hr

Applicable Compliance Method: Compliance with the lbs PE/hr limitation may be determined by multiplying the maximum water flow rate (18,000 gallons/min * 60 min/hr) by the maximum dissolved solids level based on the record keeping established in section d)(1) and d)(2), and by the maximum drift loss factor (0.0002*), and then by 3.785 l/gal x lb/453,592 mg.

* based on AP-42, Table 13.4-1 drift loss of 0.02% of circulating liquid entrained with exit air

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

17. P081, Cooling Tower #2 – (AN/North)

Operations, Property and/or Equipment Description:

Cooling Tower #2 – 39,000 gallons per minute

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F) (PTI #P0106420, issued 9/17/10, modification)	Particulate matter equal to or less than ten microns in diameter (PM_{10}) shall not exceed 1.17 lbs/hr and 5.13 tons/yr. Visible particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 (PTI #P0106420, issued 9/17/10, modification)	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 (PTI #P0106420, issued 9/17/10, modification)	See b)(2)d.
d.	OAC rule 3745-17-11(B)	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)e.
f.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	Table 3 to 40 CFR, Part 63, Subpart F – Applicability of General Provisions to Subpart F shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.
g.	40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107]	See b)(2)f., c)(2), c)(3), d)(2) and e)(3)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	[In accordance with 40 CFR 63.100(b), this emissions unit is an affected source, since it is part of a chemical manufacturing process unit that meets all the criteria specified in paragraphs (b)(1), (b)(2), and (b)(3) of 40 CFR 63.100.]	

(2) Additional Terms and Conditions

a. PTI #P0106420 for this air contaminant source takes into account the following voluntary restrictions, as proposed by the permittee for the purpose of establishing requirements to avoid the Best Available Technology (BAT) requirements under OAC rule-3745-31-05(A)(3)(a), as effective 11/30/01, and for the purpose of establishing legally and practically enforceable limitations representing the potential to emit for PM_{10}:

i. use of a drift eliminator achieving "drift loss" equal to or less than 0.001 percent [see c)(1)a.];

ii. maintain the total dissolved solids (TDS) content of the circulating cooling water at 6,000 mg/L or less [see c)(1)b.];

iii. PM_{10} mass emission limitations of 1.17 lbs/hr and 5.13 tons/yr; and

iv. a restriction that visible particulate emissions from this emissions unit shall not exceed ten percent opacity, as a six minute average.

All emissions of particulate matter from this emissions unit are PM_{10}.

b. BAT requirements for this emissions unit have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F) [see b)(2)a.]. The voluntary restrictions were intentionally established to be consistent with the BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 for two specific purposes as indicated below:

i. BAT requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 would be fulfilled by compliance with the voluntary restrictions;

ii. The emissions unit will avoid any BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06 [see b)(2)d.].

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265

changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year.

However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply to the PM10 emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration practically and legally enforceable voluntary restrictions established in this permit.

e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to the voluntary restrictions and BAT requirements established in this permit [see b)(2)b.].

f. The applicable portions of 40 CFR, Part 63, Subpart F that apply to this cooling tower are listed in 40 CFR 63.104, Heat exchange system requirements.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit potential to emit [see b)(2)a.]:

a. this emissions unit shall employ a drift eliminator achieving "drift loss" equal to or less than 0.001 percent; and

b. maintain the total dissolved solids (TDS) content of the circulating cooling water at 6,000 mg/L or less.

[OAC rule 3745-77-07(A)(1) and PTI #P0106420]

(2) The permittee shall monitor all heat exchanger systems used to cool process equipment by one of the methods specified in 40 CFR 63.104(b) or (c) unless one or more of the exemptions contained in 40 CFR 63.104(a)(1) through (6) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

(3) If a leak is detected, the permittee shall comply with the requirements of 40 CFR 63.104(d), including the repair of any heat exchanger leak as soon as practicable but not later than 45 calendar days after the permittee receives indication that a leak is present.

Once a leak has been repaired, the permittee shall confirm that the heat exchange system has been repaired within 7 calendar days of the repair or startup, whichever is later.

Delay of repair of the heat exchange systems for which leaks have been detected is allowed provided the conditions of 40 CFR 63.104(e) are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart F]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall determine the TDS content, in mg/L, of the cooling tower water in accordance with the following:

a. Conductivity shall be used to determine the TDS content of the cooling tower water based on an established correlation (or index) between TDS and conductivity of the cooling water.

b. The permittee shall test and record the conductivity of the cooling tower water using a conductivity meter on a weekly basis.

c. The permittee shall calculate and record the PM_{10} emissions rate, in pounds per hour, using the calculation specified in f)(1)a. of this permit, on a weekly basis.

Other U.S. EPA-approved methods for determining the TDS content may be used with prior approval from the Ohio EPA, Northwest District Office.

[OAC rule 3745-77-07(C)(1) and PTI #P0106420]

(2) The permittee shall comply with the applicable monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1) and PTI #P0106420]

(2) The permittee shall submit deviation (excursion) reports that identify any exceedances of the TDS content requirement. Each report shall be submitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07(C)(1) and PTI #P0106420]

(3) The permittee shall comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart F [See 40 CFR 63.100 – 63.107].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart F]

f) Testing Requirements

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

a. Emission Limitations: PM_{10} emissions shall not exceed 1.17 lbs/hr and 5.13 tons/yr.

Applicable Compliance Method: Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.001 percent) by the maximum circulating water flow rate (39,000 gallons/min), the maximum TDS content (6,000 mg/L), and then applying the conversion factors of 60 min/hr, 3.785 L/gal and 454,000 mg/lb.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.001 percent.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0106420]

b. Emission Limitation: Visible PE shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method: If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

[OAC rule 3745-77-07(C)(1) and PTI #P0106420]

g) Miscellaneous Requirements

(1) None.

18. P082, Barex Cooling Tower

Operations, Property and/or Equipment Description:

Barex Cooling Tower – 2,750 gallons per minute

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 [PTI issued 4/17/74, no PTI # established]	See b)(2)a.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. No emissions limitations were established pursuant to this rule.

b. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

c. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the process weight cannot be ascertained.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

19. P803, Barex Fugitive Emissions

Operations, Property and/or Equipment Description:

Barex Fugitive Emissions

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(DD)	See b)(2)a., c)(1), d)(1) and e)(1)
b.	40 CFR, Part 60, Subpart VV	See b)(2)a., c)(2), d)(2) and e)(2)
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 63, Subpart JJJ [40 CFR 63.1310 – 63.1336] [In accordance with 40 CFR 63.1310(a)(2), this emissions unit consists of fugitive emissions from an existing affected source consisting of each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of 40 CFR 63.1310, that is manufacturing the same primary product, and that is located at a plant site that is a major source, subject to the emission limitations/control measures in this section.]	See b)(2)a., c)(3), d)(3) and e)(3)
e.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart JJJ – Applicability of General Provisions to Subpart JJJ shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. The permittee shall include the appropriate process equipment and regulated components for emissions unit P803 in the current site fugitive leak detection and repair (LDAR) program. The permittee shall comply with the applicable LDAR standards listed in OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart VV; and 40 CFR, Part 63, Subpart JJJ [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17); 40 CFR 60.480 through 60.489; and 40 CFR 63.1310 through 63.1336].

c) Operational Restrictions

(1) The permittee shall comply with the applicable LDAR operational restrictions listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable LDAR operational restrictions listed in 40 CFR, Part 60, Subpart VV. [See 40 CFR 60.480 through 60.489].

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 60, Subpart VV]

(3) The permittee shall comply with the applicable LDAR operational restrictions listed in 40 CFR, Part 63, Subpart JJJ. [See 40 CFR 63.1310 through 63.1336].

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart JJJ]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(C)(1) and See OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in 40 CFR, Part 60, Subpart VV. [See 40 CFR 60.480 through 60.489].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart VV]

(3) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart JJJ. [See 40 CFR 63.1310 through 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

e) Reporting Requirements

(1) The permittee shall comply with the applicable LDAR reporting requirements listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable LDAR reporting requirements listed in 40 CFR, Part 60, Subpart VV. [See 40 CFR 60.480 through 60.489].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 60, Subpart VV]

(3) The permittee shall comply with the applicable LDAR reporting requirements listed in 40 CFR, Part 63, Subpart JJJ. [See 40 CFR 63.1310 through 63.1336].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart JJJ]

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) None.

20. Emissions Unit Group – Fugitive Emissions - P804, P805

EU ID	Operations, Property and/or Equipment Description
P804	Acrylonitrile Fugitive Emissions
P805	CAPU Fugitive Emissions

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(DD)	See b)(2)a., c)(1), d)(1) and e)(1)
b.	40 CFR, Part 60, Subpart VV	See b)(2)b.
c.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
d.	40 CFR, Part 63, Subpart H [40 CFR 63.160 – 63.183] [In accordance with 40 CFR 63.160(a), emissions units P804 and P805 are affected sources, since each emissions unit includes fugitive emission equipment components subject to leak regulations of this Subpart that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific Subpart in 40 CFR, Part 63 that references this Subpart.]	See b)(2)a., b)(2)b., c)(2) through c)(6), d)(2), e)(2) and f)(1)
e.	40 CFR, Part 63, Subpart YY	See b)(2)a., c)(7), d)(3), e)(3) and f)(2)
f.	40 CFR 63.1 – 63.15	Table 4 to 40 CFR, Part 63, Subpart H – Applicability of General Provisions to Subpart H shows which parts of the General Provisions in 40 CFR 63.1 – 63.15 apply.

(2) Additional Terms and Conditions

a. The permittee shall include the appropriate process equipment and regulated components for emissions units P804 and P805 in the current site fugitive leak detection and repair (LDAR) program. The permittee shall comply with the applicable LDAR standards listed in OAC rule 3745-21-09(DD); 40 CFR, Part 63, Subpart H; and 40 CFR, Part 63, Subpart YY [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17); 40 CFR 63.1310 through 63.1336; 40 CFR 63.160 through 63.183; and 40 CFR 63.1100 through 63.1114].

b. 40 CFR, Part 60, Subpart VV regulations overlap with those of 40 CFR, Part 63, Subpart H. 40 CFR 63.160(b) and (c) address this overlap and state that equipment subject to 40 CFR, Part 60, Subpart VV is required to comply only with the provisions of 40 CFR, Part 63, Subpart H.

c) Operational Restrictions

(1) The permittee shall comply with the applicable LDAR operational restrictions listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall identify each piece of equipment subject to 40 CFR, Part 63, Subpart H and monitor it in accordance with the requirements of the Subpart.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart H]

(3) The permittee shall comply with the LDAR operational restrictions in accordance with 40 CFR, Part 63, Subpart H.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart H]

(4) Delay of repair of equipment for which leaks have been detected is allowed provided the conditions of 40 CFR 63.171 are met.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart H]

(5) The permittee shall comply with the LDAR program conditions for closed-vent systems and control devices in accordance with 40 CFR 63.172.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart H]

(6) The permittee shall comply with the LDAR programs for surge control vessels in accordance with 40 CFR 63.170.

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart H]

(7) The permittee shall comply with the applicable LDAR operational restrictions listed in 40 CFR, Part 63, Subpart YY. [See 40 CFR 63.1100 through 63.1114].

[OAC rule 3745-77-07(A)(1) and 40 CFR, Part 63, Subpart YY]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(C)(1) and See OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart H [See 40 CFR 63.160 – 63.183].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart H]

(3) The permittee shall comply with the applicable LDAR monitoring and record keeping requirements listed in 40 CFR, Part 63, Subpart YY. [See 40 CFR 63.1100 through 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

e) Reporting Requirements

(1) The permittee shall comply with the applicable LDAR reporting requirements listed in OAC rule 3745-21-09(DD). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(DD)]

(2) The permittee shall comply with the applicable LDAR reporting requirements listed in 40 CFR, Part 63, Subpart H [See 40 CFR 63.160 – 63.183].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart H]

(3) The permittee shall comply with the applicable LDAR reporting requirements listed in 40 CFR, Part 63, Subpart YY. [See 40 CFR 63.1100 through 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

f) Testing Requirements

(1) The permittee shall comply with the applicable LDAR testing requirements listed in 40 CFR, Part 63, Subpart H [See 40 CFR 63.160 – 63.183].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart H]

(2) The permittee shall comply with the applicable LDAR testing requirements listed in 40 CFR, Part 63, Subpart YY. [See 40 CFR 63.1100 through 63.1114].

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 63, Subpart YY]

g) Miscellaneous Requirements

(1) None.