

3/2/2012

Certified Mail

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

Facility ID: 0302020371  
Permit Number: P0105128  
County: Allen

RE: DRAFT AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Lima News. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://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 draft permit or in narrative format. Any comments must be sent to the following:

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

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
Ohio EPA-NWDO; Indiana



PUBLIC NOTICE  
3/2/2012 Issuance of Draft Air Pollution Title V Permit

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

FACILITY DESC.: All Other Basic Organic Chemical Manufacturing

PERMIT #: P0105128

PERMIT TYPE: Renewal

PERMIT DESC: Renewal Title V Permit for an Industrial Organic Chemical Production Facility

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Andrea Moore, Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402. Ph: (419)352-8461





## Statement of Basis For Air Pollution Title V Permit

Facility ID:	0302020371
Facility Name:	Ineos USA, LLC
Facility Description:	Industrial Organic Chemical Production
Facility Address:	1900 Fort Amanda Rd., Lima, OH 45804
Permit #:	P0105128, Renewal
<p>This facility is subject to Title V because it is major for:</p> <p> <input type="checkbox"/> Lead              <input type="checkbox"/> Sulfur Dioxide              <input checked="" type="checkbox"/> Carbon Monoxide              <input checked="" type="checkbox"/> Volatile Organic Compounds              <input checked="" type="checkbox"/> Nitrogen Oxides  <input checked="" type="checkbox"/> Particulate Matter ≤ 10 microns              <input type="checkbox"/> Single Hazardous Air Pollutant              <input checked="" type="checkbox"/> Combined Hazardous Air Pollutants  <input checked="" type="checkbox"/> Maximum Available Control Technology Standard(s)         </p>	

### A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01 (U)?	Yes
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A



Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	<p>B001, P061, P062, P069, P084, T120, T121, T122, T123, T129 – added as insignificant emissions units</p> <p>P016, T004, T007, T008, T009, T011, T118, Z006, Z022, Z025, Z026, Z027, Z029, Z030, Z035, Z036, Z037, Z039, Z042 and Z043 – deleted from permit. These emissions units were determined to be trivial, and did not require inclusion.</p> <p>T002, T010, T020, T034, T116, Z012, Z013, Z046 – deleted from permit. These emissions units have been permanently shut down.</p> <p>Z003 – renumbered to T124</p> <p>Z004 – renumbered to T125</p> <p>Z005 – renumbered to P088, de minimis source, moved to de minimis section for insignificant emissions units</p> <p>Z016 – renumbered to T126</p> <p>Z017 – renumbered to T127</p> <p>Z024 – renumbered to T128</p> <p>Z031 – renumbered to T130, de minimis source, moved to de minimis section for insignificant emissions</p> <p>Z049 – renumbered to P807</p> <p>P006, P011 – added description to section b)(1) for 40 CFR, Part 63, Subpart JJJ and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subpart JJJ</p>



P009, P010, P067 – combined into an emissions group; added emission limit of 0.12 lb VOC/hr for P067 from PTI #03-3369; added description to section b)(1) for 40 CFR, Part 63, Subpart JJJ and added 40 CFR, Part 63, Subpart A as applicable rule; added operational restriction, monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subpart JJJ

P035 - added description to section b)(1) for 40 CFR, Part 60, Subpart Db; 40 CFR, Part 63, Subparts F, G and H; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subparts G and H; deleted OAC rule 3745-23-06(B); added CAM requirements for absorber offgas incinerator

P038 – added EVEL limit of 50% opacity from 10/21/05 approval letter; added the revised PE limit of 30.99 lbs/hr, due to change to EVEL limit; added minimum scrubber water flow operational restriction of 20 gal/min from 10/21/05 approval letter; added SO2 limit of 206.88 lbs/hr from OAC rule 3745-18-06(E)(2); deleted OAC rule 3745-23-06(B); added CAM requirements for scrubber

P039 – revised PE limit to 5.38 lbs/hr; added SO2 limit of 39.36 lbs/hr from OAC rule 3745-18-06(E)(2)

P043 - added description to section b)(1) for 40 CFR, Part 63, Subpart JJJ and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subpart JJJ; deleted OAC rule 3745-23-06(B)

P048 - added description to section b)(1) for 40 CFR, Part 63, Subparts F, G and H; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subparts G and H; added CAM requirements for the flare

(1) P050 - added description to section b)(1) for 40 CFR, Part 63, Subpart G; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subparts G and H; added performance test requirements for transfer rack to demonstrate the scrubber HAP removal efficiency within 2.5 years after issuance of permit

P065 - added description to section b)(1) for 40 CFR, Part 63, Subpart JJJ and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subpart JJJ; deleted OAC rule 3745-23-06(B); added CAM requirements



for the cyclone

P068 - added description to section b)(1) for 40 CFR, Part 63, Subpart JJJ and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subpart JJJ; revised VOC limit to 0.9 lb/hr, based on PTI #03-3369 modification

P074 – added 40 CFR, Part 60, Subpart A as an applicable rule; added description to section b)(1) for 40 CFR, Part 63, Subparts F, G and H; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subparts G and H; added CAM requirements for the flare

P075 - added 40 CFR, Part 60, Subpart A as an applicable rule; added description to section b)(1) for 40 CFR, Part 63, Subparts F, G and H; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added monitoring, record keeping, reporting and testing to terms and conditions for 40 CFR, Part 63, Subparts G and H; stack testing no longer applicable, based on previous testing conducted 11/12/04 and parametric monitoring for flare and thermal oxidizer; added new emissions limitations from PTI #P0103909

P077 – deleted operational restrictions for heat content and exit velocity for flare, since the flare is non-assisted and these restrictions were erroneously included in the initial Title V permit; deleted heat content and exit velocity testing requirements for flare, since it is non-assisted and the requirements were erroneously included in the initial Title V permit

P078 – added new BAT language from PTI #P0109073 (replaced one baghouse with two new baghouses with better collection efficiencies)

P080 - added description to section b)(1) for 40 CFR, Part 63, Subpart F and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F

P081 - added description to section b)(1) for 40 CFR, Part 63, Subpart F and added 40 CFR, Part 63, Subpart A as applicable rule; added monitoring, record keeping and reporting to terms and conditions for 40 CFR, Part 63, Subpart F; added new emissions limitations from PTI #P0106420



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

Term and Condition (paragraph)	Basis		<u>Comments</u>
	SIP (3745- )	Other	
B.1			Lists Facility wide terms and conditions that are enforceable under state law only
B.2	77-07(A)(13)	N	18. Lists insignificant emissions units subject to one or more applicable requirements contained in a permit to install or in the SIP-approved versions of OAC Chapters 3745-17 and 3745-21
B.3	15-05	N	a) Lists insignificant emissions units which are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05
B.4	N	40 CFR, Part 60, Subpart Db	Lists applicability of 40 CFR, Part 60, Subpart Db
B.5	N	40 CFR, Part 60, Subpart Kb	Lists applicability of 40 CFR, Part 60, Subpart Kb
B.6	N	40 CFR, Part 60, Subpart VV	Lists applicability of 40 CFR, Part 60, Subpart VV
B.7	N	40 CFR, Part 60, Subpart III	Lists applicability of 40 CFR, Part 60, Subpart III
B.8	N	40 CFR, Part 60, Subpart NNN	Lists applicability of 40 CFR, Part 60, Subpart NNN
B.9	N	40 CFR, Part 63, Subpart F	Lists applicability of 40 CFR, Part 63, Subpart F
B.10	N	40 CFR, Part 63, Subpart G	Lists applicability of 40 CFR, Part 63, Subpart G



B.11	N	40 CFR, Part 63, Subpart H	Lists applicability of 40 CFR, Part 63, Subpart H
B.12	N	40 CFR, Part 63, Subpart JJJ	Lists applicability of 40 CFR, Part 63, Subpart JJJ
B.13	N	40 CFR, Part 63, Subpart EEEE	Lists applicability of 40 CFR, Part 63, Subpart EEEE
B.14	N	40 CFR, Part 63, Subpart DDDDD	Lists applicability of 40 CFR, Part 63, Subpart DDDDD
B.15	21-09(DD)	N	19. Lists applicability of OAC rule 3745-21-09(DD)
B.16	N	40 CFR, Part 64	20. Lists applicability of Compliance Assurance Monitoring (CAM) requirements

**C. Emissions Unit Terms and Conditions**

<p>Key:          EU = emissions unit ID          ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)          OR = operational restriction          M = monitoring requirements          St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement</p>															
<p>ENF = did noncompliance issues drive the monitoring requirements?          R = record keeping requirements          Rp = reporting requirements          ET = emission testing requirements (not including compliance method terms)          Misc = miscellaneous requirements</p>															
EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	Comments
		SIP (3745- )	Other												



P011, P035, P039, P065, P078	Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule	17-07 (A)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – daily visible emissions (VE) checks provide indication of ongoing compliance. COMS are not economically justified. CAM is applicable. ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring formal Method 9 readings.
P043, P075	Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule	17-07 (A)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – weekly visible emissions (VE) checks provide indication of ongoing compliance. COMS are not economically justified. CAM is not applicable. ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring formal Method 9 readings.
P080	Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule	17-07 (A)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – weekly records of total dissolved solids and particulate emissions calculation provide indication of ongoing compliance. COMS are not possible to be installed on cooling towers. ET - the M, R & Rp requirements are sufficient to demonstrate compliance without requiring formal Method 9 readings.
P038	Visible PE shall not exceed 50% opacity as a six-minute	17-07 (C)	N	N	Y	Y	N	N	Y	N	Y	N	N	N	OR – parametric monitoring for scrubber, records each operating shift of scrubber water flow rate, along with daily average scrubber water flow rate. CAM is applicable. A COM is not economically justified.



	average, except as provided by rule														ET - the M, R & Rp requirements are sufficient to demonstrate compliance without requiring formal Method 9 readings.
P081	Visible PE shall not exceed 10% opacity as a six-minute average	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(F) OR – use of drift eliminator and maintain total dissolved content in cooling water less than 6,000 mg/liter with solids content monitoring to determine compliance. CAM is not applicable. ET – TDS monitoring is sufficient to determine compliance without requiring VE checks.
P048, P074	Exempt	17-07 (A)	N	Y	N	N	N	N	N	N	N	N	N	N	ND – these emissions units are exempt from the visible PE 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. M, R, Rp & ET – there are no emissions limitations established pursuant to this rule, therefore, no M, R, Rp or ET is required.
P011	5.96 lbs PE/hr	17-11 (B)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified. ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring emissions testing.
P038	30.99 lbs PE/hr	17-11 (B)	N	N	Y	Y	N	N	Y	N	Y	N	Y	N	OR - parametric monitoring for scrubber, records each operating shift of scrubber water flow rate, along with daily average scrubber water flow rate. CAM is applicable. M,R – records of scrubber water flow rate provide indication of ongoing compliance. A CEM is not economically justified.



P039	5.38 lbs PE/hr	17-11 (B)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified.  ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring emissions testing.
P043	1.73 lbs PE/hr	17-11 (B)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified.  ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring emissions testing.
P080	98.8 lbs PE/hr	17-11 (B)	N	N	N	Y	N	N	Y	N	Y	N	N	N	M,R – weekly total dissolved solids (TDS) monitoring for cooling water provide indication of ongoing compliance. A CEM is not economically justified.  ET – calculations based on the appropriate AP-42 emission factor and the maximum TDS are sufficient to show compliance without requiring emissions testing.
P081	1.17 lbs PM10/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(F)  OR, M, R – weekly total dissolved solids (TDS) monitoring for cooling water provide indication of ongoing compliance. A CEM is not economically justified. CAM is not applicable.  ET – calculations based on the appropriate AP-42 emission factor and the maximum TDS are sufficient to show compliance without requiring emissions testing.
P081	5.13 tons PM/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(F)  OR, M, R – weekly total dissolved solids (TDS) monitoring for cooling water provide indication of ongoing compliance. A CEM is not economically justified. CAM is not applicable.  ET – the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum



															annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation.
P035, P065, P075, P078	None	17-11 (B)	N	Y	N	N	N	N	N	N	N	N	N	N	ND – the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05. M, R, Rp & ET – there are no emissions limitations established pursuant to this rule, therefore, no M, R, Rp or ET is required.
P048, P074	Exempt	17-11 (B)	N	Y	N	N	N	N	N	N	N	N	N	N	ND – 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)(a)(i), Figure II of OAC rule 3745-17-11 does not apply. Table 1 of OAC rule 3745-17-11 does not apply because the process weight rate, 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. M, R, Rp & ET - there are no emissions limitations established pursuant to this rule, therefore, no M, R, Rp or ET is required.
P006, P009, P010, P011, P043, P048, P050, P051, P052, P065, P067, P068, P074, P075, P077	None	21-07 (M)	N	Y	N	N	N	N	N	N	N	N	N	N	ND – rule is not applicable because the emissions unit does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).



P035, P048, P050, P051, P052, P074, P075	See rule	21-09 (DD)	N	N	Y	Y	N	N	Y	N	Y	N	Y	N	OR – operational restrictions as required by rule. M, R – leak detection and repair monitoring program as required by rule.
P035	See rule	21-09 (EE)	N	N	Y	Y	N	N	Y	N	N	N	N	N	OR – operational restrictions as required by rule. Rp & ET – this rule does not contain any Rp or ET requirements.
P035	6.0 lbs PE/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R - daily VE checks provide indication of ongoing compliance. A CEM is not economically justified.
P035	26.3 tons PE/yr	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified.  ET – the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation, and no ET is required.
P035	5,736 lbs CO per rolling 24-hr period	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R – CEM data used for compliance demonstration
P035	978.0 tons CO/yr based upon a rolling, 365- day summation of daily emissions	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – CEM data used for compliance demonstration N – the M, R & Rp are sufficient to demonstrate compliance



P035	6,614 lbs NOx per rolling 24-hr period	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R – CEM data used for compliance demonstration
P035	1,207.1 tons NOx/yr	N	Y	N	N	N	N	N	N	N	N	N	N	N	Other – OAC rule 3745-31-05 M, R, Rp & ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation, and no M, R, Rp & ET is required.
P035	2.5 lbs SO2/hr	N	Y	N	N	N	N	N	N	N	N	N	Y	N	Other – OAC rule 3745-31-05 M, R & Rp – emissions testing will provide basis for compliance, therefore, no M, R or Rp is necessary
P035	11.0 tons SO2/yr	N	Y	N	N	N	N	N	N	N	N	N	N	N	Other – OAC rule 3745-31-05 M, R, Rp & ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation, and no M, R, Rp & ET is required.
P035	130.8 lbs non-methane hydrocarbons (NMHC)/hr	N	Y	N	N	N	N	N	N	N	N	N	Y	N	Other – OAC rule 3745-31-05 M, R & Rp – emissions testing will provide basis for compliance, therefore, no M, R or Rp is necessary
P035	573.0 tons NMHC/yr	N	Y	N	N	N	N	N	N	N	N	N	N	N	Other – OAC rule 3745-31-05 M, R, Rp & ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation, and no M, R, Rp & ET is required.
P038	206.88 lbs	18-06	N	N	Y	Y	N	N	Y	N	Y	N	N	N	OR – only natural gas is allowed to be fired



	SO2/hr	(E)(2)													(inherently clean fuel). A CEM is not economically justified. ET – M, R and Rp are sufficient to demonstrate compliance (by firing only natural gas)
P039	39.36 lbs SO2/hr	18-06 (E)(2)	N	N	Y	Y	N	N	Y	N	Y	N	N	N	OR – only natural gas is allowed to be fired (inherently clean fuel). CAM is applicable. A CEM is not economically justified. ET – M, R and Rp are sufficient to demonstrate compliance (by firing only natural gas)
P043	None	18-06(E)	N	Y	N	N	N	N	N	N	N	N	N	N	ND – rule is not applicable because the process weight rate is less than 1,000 lbs/hr.
P048	1.63 lbs OC/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 OR – flare and condenser parametric monitoring. CAM is applicable. A CEM is not economically justified. M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) and records of condenser temperature provide indication of ongoing compliance. ET – M, R & Rp requirements are sufficient to demonstrate compliance
P048	7.14 tons OC/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 OR – flare and condenser parametric monitoring. CAM is applicable. A CEM is not economically justified. M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) and records of condenser temperature provide indication of ongoing compliance. ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation, and no M, R, Rp & ET is required.



P065	5.20 lbs PE/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified. CAM is applicable. ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring emissions testing.
P065	3.40 lbs PM10/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – daily VE checks provide indication of ongoing compliance. A CEM is not economically justified. CAM is applicable. ET – the M, R & Rp requirements are sufficient to demonstrate compliance without requiring emissions testing.
P065	3.8 lbs acrylonitrile/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R, Rp, ET – requirements for Group 2 continuous process vents in 40 CFR, Part 63, Subpart JJJ. A CEM is not economically justified.
P065	3.5 lbs methyl acrylate/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R, Rp, ET – requirements for Group 2 continuous process vents in 40 CFR, Part 63, Subpart JJJ. A CEM is not economically justified.
P065	4.8 lbs VOC/hr as carbon	N	Y	N	N	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 M, R, Rp, ET – requirements for Group 2 continuous process vents in 40 CFR, Part 63, Subpart JJJ. A CEM is not economically justified.
P067	0.12 lb VOC/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 OR – incinerator and condenser parametric monitoring. CAM is not applicable. A CEM is not economically justified. M, R – records of incinerator combustion temperature and condenser temperature provide indication of ongoing compliance. M, R, Rp, ET – requirements for Group 1 batch process vents in 40 CFR, Part 63, Subpart JJJ



P068	0.9 lb VOC/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 OR – scrubber parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – scrubber water flow rate monitoring provides indication of ongoing compliance. M, R, Rp, ET - requirements for Group 2 continuous process vents in 40 CFR, Part 63, Subpart JJJ
P074	3.28 lbs OC/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05 OR – flare parametric monitoring. CAM is applicable. A CEM is not economically justified.  M, R - flare monitoring and record keeping as required by 40 CFR 63.11(b) provide indication of ongoing compliance.
P074	14.37 tons OC/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) provide indication of ongoing compliance. A CEM is not economically justified.  ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation.
P075	105.60 lbs PM10/day	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05(A)(3) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.



P075	6.66 tons PM10 per rolling 12-month period	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(D) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance. ET – parametric monitoring and record keeping are sufficient to demonstrate compliance without requiring testing.
P075	544.80 lbs CO/day	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05(A)(3) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.
P075	18.35 tons CO per rolling 12-month period	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(D) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance. ET – parametric monitoring and record keeping are sufficient to demonstrate compliance without requiring testing.
P075	6,016.80 lbs NOx/day	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05(A)(3) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not



															economically justified. M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.
P075	332.44 tons NOx per rolling 12-month period	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(D) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified. M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance. ET – parametric monitoring and record keeping are sufficient to demonstrate compliance without requiring testing.
P075	72.00 lbs SO2/day	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – OAC rule 3745-31-05(A)(3) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified. M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.
P075	13.23 tons SO2/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05(A)(3) OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified. M, R – closed vent, flare and incinerator M & R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart



															<p>NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.</p> <p>ET – parametric monitoring and record keeping are sufficient to demonstrate compliance without requiring testing.</p>
P075	3,069.60 lbs VOC/day	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	<p>Other – OAC rule 3745-31-05(A)(3)</p> <p>OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.</p> <p>M, R – closed vent, flare and incinerator M &amp; R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.</p>
P075	38.64 tons VOC per rolling 12-month period	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	<p>Other – OAC rule 3745-31-05(D)</p> <p>OR – closed vent, flare and incinerator parametric monitoring. CAM is not applicable. A CEM is not economically justified.</p> <p>M, R – closed vent, flare and incinerator M &amp; R as required by 40 CFR 63.11(b); OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subpart NNN; and 40 CFR, Part 63, Subpart G. Flare monitoring and incinerator temperature monitoring provide indication of ongoing compliance.</p> <p>ET – parametric monitoring and record keeping are sufficient to demonstrate compliance without requiring testing.</p>
P077	0.12 lb NH3/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	<p>Other – OAC rule 3745-31-05</p> <p>OR – flare parametric monitoring. CAM is not applicable. A CEM is not economically justified.</p> <p>M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) provides indication of ongoing compliance.</p>



															ET – the hourly limitation is based on the emissions unit’s potential to emit (a 98% reduction applied to an uncontrolled rate of 5.9 lbs NH3/hr). The monitoring and record keeping requirements ensure that the flare is operating at the proper efficiency and are sufficient to demonstrate compliance.
P077	0.52 tons NH3/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 OR – flare parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) provides indication of ongoing compliance. ET - the tons/yr limitation is based on the emissions unit’s potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation.
P077	0.001 lb OC/hr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 OR – flare parametric monitoring. CAM is not applicable. A CEM is not economically justified.  M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) provides indication of ongoing compliance. ET – the hourly limitation is based on the emissions unit’s potential to emit (a 98% reduction applied to an uncontrolled rate of 0.065 lb OC/hr). The monitoring and record keeping requirements ensure that the flare is operating at the proper efficiency and are sufficient to demonstrate compliance.
P077	0.006 ton OC/yr	N	Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 OR – flare parametric monitoring. CAM is not applicable. A CEM is not economically justified.



															M, R – flare monitoring and record keeping as required by 40 CFR 63.11(b) provides indication of ongoing compliance. ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation.
P078	0.31 lb PE/hr	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R, ET – weekly visible emissions checks provide indication of ongoing compliance. A CEM is not economically justified.
P078	1.36 tons PE/yr	N	Y	N	N	Y	N	N	Y	N	Y	N	N	N	Other – OAC rule 3745-31-05 M, R – weekly visible emissions checks provide indication of ongoing compliance. A CEM is not economically justified. ET - the tons/yr limitation is based on the emissions unit's potential to emit (maximum hourly emission rate times the maximum annual hours of operation), therefore, if compliance is shown with the hourly emission rate, compliance will also be shown with the annual limitation.
P006, P009, P010, P011, P038, P043	None	N	Y	N	N	N	N	N	N	N	N	N	N	N	Other – OAC rule 3745-31-05 ET – no limits were established pursuant to this rule, therefore, no M, R, Rp or ET is required.
P035	0.10 lb/mmBtu of actual heat input (expressed as NO2)	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 60, Subpart Db OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.



P035, P048, P062, P074, P075	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 60, Subpart VV OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P035	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 60, Subpart III OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P035, P048, P074, P075	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 60, Subpart NNN OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P006, P009, P010, P011, P035, P043, P048, P050, P065, P067, P068, P074, P075, P080, P081	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR 63.6(e)(3) OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P048, P052, P074, P075, P077	No visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR 63.11(b)(4) OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.



P035, P048, P062, P074, P075, P080, P081	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 63, Subpart F OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P035, P048, P050, P062, P074, P075	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 63, Subpart G OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P035, P048, P050, P062, P074, P075	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 63, Subpart H OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.
P006, P009, P010, P011, P043, P065, P067, P068, P069	See rule	N	Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Other – 40 CFR, Part 63, Subpart JJJ OR – operational restrictions as required by rule. M, R – monitoring and record keeping as required by rule.





**DRAFT**

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

Facility ID:	0302020371
Permit Number:	P0105128
Permit Type:	Renewal
Issued:	3/2/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





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 Reaction and Absorption Section.....	35
5. P038, Catalyst Spray Dryer and #2 Calciner .....	53
6. P039, Catalyst #1 Calciner.....	59
7. P043, Barex #1 Fines Dryer .....	63
8. P048, Acetonitrile Reactor and Absorption Section .....	67
9. P050, Nitriles Loading Rack.....	75
10. P051, Nitriles Drum Loading System.....	80
11. P052, HCN Loading Rack .....	82
12. P065, Barex #2 Strand Dryer .....	84
13. P068, Barex #2 Pasteline.....	90
14. P074, Acetonitrile Recovery and Purification Section.....	94
15. P075, Acrylonitrile Plant #2 Recovery & Purification Section.....	102
15. P077, Ammonia Recovery System.....	118
16. P078, Barex Dust Collection System.....	122
17. P080, Cooling Tower #1.....	125
18. P081, Cooling Tower #2.....	128



## 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: 3/2/2012  
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

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

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.

- (1) 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: 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; or the 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 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 contaminant 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.)

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) B001 – six natural gas fired comfort heaters, each less than 4 million Btu per hour heat input;
  - b) G001 - Gasoline dispensing facility;
  - c) P003 - Barex elastomer charging;
  - d) P018 - Catalyst calciner heaters;
  - e) P061 - Barex solids handling system [PTI #03-3552];
  - f) P062 – Deepwell pretreatment area - solids removal and dewatering (sand filter, clarifier, filter press);
  - g) P069 – Barex #2 fines dryer [PTI #03-3369];
  - h) P082 – Barex plant cooling tower; (PTI issued 4/17/74, no PTI # established)
  - i) P084 – 460 horsepower diesel fuel fired fire water pump [PBR 07135];
  - j) T001 - 22,000 gallon Barex acrylonitrile internal floating roof tank;
  - k) T003 - 22,000 gallon fixed roof methyl acrylate tank;
  - l) T005 - 1,160 gallon Barex PVP solution tank;
  - m) T006 - 6,132 gallon fixed roof Barex plant recovered monomer storage tank (T-18);
  - n) T015 - 30,000 gallon acetonitrile internal floating roof tank (T-35);
  - o) T019 - 6,132 gallon fixed roof Barex plant recovered monomer storage tank (T-8);
  - p) T023 - 720,000 gallon internal floating roof acrylonitrile storage tank (T-1);
  - q) T024 - 720,000 gallon internal floating roof acrylonitrile storage tank (T-2);
  - r) T025 - 650,000 gallon internal floating roof acrylonitrile storage tank (T-2A);
  - s) T026 - 95,100 gallon internal floating roof acrylonitrile storage tank (T-3);
  - t) T027 - 120,000 gallon internal floating roof acrylonitrile storage tank (T-3A);



- u) T028 - 95,100 gallon internal floating roof acrylonitrile storage tank (T-4);
- v) T031 - 8,700 gallon fixed roof oxazole filter feed tank #7;
- w) T032 - 329,000 gallon internal floating roof acrylonitrile storage tank (T-51);
- x) T033 - 329,000 gallon internal floating roof acrylonitrile storage tank (T-52);
- y) T065 - 22,000 gallon fixed roof wastewater equalization storage tank, with absorber off-gas incinerator (AOGI) (T-101) [PTI #03-3549];
- z) T066 - 6,000 gallon fixed roof wastewater sludge storage tank, with absorber off-gas incinerator (AOGI) (T-111) [PTI #03-3549];
- aa) T067 - 11,800 gallon filtered wastewater storage tank, with absorber off-gas incinerator (AOGI) (T-103) [PTI #03-3549];
- bb) T068 - 8,500 gallon fixed roof filtered wastewater reject storage tank, with absorber off-gas incinerator (AOGI) (T-102) [PTI #03-3549];
- cc) T069 - 960,000 gallon internal floating roof west deepwell surge tank (T-105) [PTI #03-3549];
- dd) T070 - 960,000 gallon internal floating roof west deepwell surge tank (T-106) [PTI #03-3549];
- ee) T073 - 300,000 gallon fixed roof wastewater storage tank [PTI #03-3554];
- ff) T079 - 678,000 gallon internal roof acrylonitrile storage tank (T-5) [PTI #03-5554];
- gg) T080 - 678,000 gallon internal roof acrylonitrile storage tank (T-6) [PTI #03-5554];
- hh) T081 - 90,000 gallon internal roof acrylonitrile storage tank (T-41) [PTI #03-5680];
- ii) T082 - 90,000 gallon internal roof acrylonitrile storage tank (T-42) [PTI #03-5680];
- jj) T084 - 39,000 gallon South hydrogen cyanide storage drum [PTI #03-6435]
- kk) T088 - 7,180 gallon fixed roof formaldehyde storage tank [PTI #03-6956];
- ll) T090 - Used oil storage tank [PTI #03-7280];
- mm) T091 - Soda ash storage tank [PTI #03-7457];
- nn) T092 - 92,000 gallon internal roof acrylonitrile slopwater storage tank (T-8);
- oo) T093 - 90,000 gallon internal roof acetonitrile storage tank (T-50) [PTI #03-10545];
- pp) T113 - 36,200 gallon fixed roof crude/product grade acetonitrile storage tank (T-26) [PTI #03-13314];
- qq) T114 - 14,890 gallon fixed roof nitriles storage tank (T-9) [PTI #03-13347]; and
- rr) T115 - 30,000 gallon fixed roof acetonitrile storage tank (T-36) [PTI #03-13593];



- ss) T120 – Refrigerant brine storage tank;
- tt) T121 – Elastomer annex storage tank;
- uu) T122 – Organic dike collection storage tank;
- vv) T123 – Reactor cleanings storage tank;
- ww) T124 - 2,000 gallon HQ surge tank;
- xx) T125 - 480 gallon MEHQ tank;
- yy) T126 - 8,700 gallon fixed roof acetonitrile tank No. 23;
- zz) T127 - 8,700 gallon fixed roof acetonitrile tank No. 24;
- aaa) T128 - Brine refrigeration system tank; and
- bbb) T129 – North HCN drum [PTI #P0105820].

[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, T093, T113, T114 and T115. 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: P035, P048, P062, 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.
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: P035, 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, 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: P035, P048, P050, P062, P074 and P075. 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 unit P062:

- (1) The permittee shall comply with the applicable standards 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 monitoring and record keeping requirements 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 reporting requirements 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]

- (4) The permittee shall comply with the applicable testing requirements 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]

- 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, P807, T001, T006, T019, T121, T122 and T123. 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 units contained in this permit are subject to 40 CFR, Part 63, Subpart EEEE: T088 and T120. 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 units in this permit are subject to the aforementioned requirements: B001 and 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): P035, P048, P050, P051, P052, P062, P074 and P075. 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, P035, P038, P039, P048, P065, P074 and P075 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

**[Authority for term: [OAC rule 3745-77-07(C)(1), 40 CFR, Part 64]**

## **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)d., 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 OAC rule 3745-21-07(G) and 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).
  - d. The permittee shall comply with the equipment leak provisions listed in 40 CFR, Part 63, Subpart JJJ (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**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
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	See b)(2)b. through b)(2)d., c)(1), d)(1) through d)(4), e)(1) and f)(2)

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	limitations/control measures in this section.]	
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).
- d. The permittee shall comply with the applicable equipment leak provisions listed in 40 CFR, Part 63, Subpart JJJ (See 40 CFR 63.1310 – 63.1336).
- e. 40 CFR 63.1331(a) requires each affected source to comply with the requirements of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous air Pollutants for Equipment Leaks). The provisions outlined in 40 CFR, Part 63, Subpart H are more stringent than the fugitive emission requirements outlined in PTI No. 03-3369.

In order to minimize fugitive hydrocarbon emissions from the Barex resin reactor process, the permittee shall include the appropriate process equipment in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational

restrictions, monitoring and record keeping, reporting, and testing) of 40 CFR, Part 63, Subpart H.

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]

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

- (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.

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

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 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(DD)	See b)(2)g.
d.	OAC rule 3745-21-09(EE)	See b)(2)d.
e.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
f.	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/	See b)(2)a. and b)(2)e.

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	hr, subject to the emission limitations/control measures in this section.]	
g.	40 CFR, Part 60, Subpart VV [40 CFR 60.480 – 60.489]	See b)(2)b.
h.	40 CFR, Part 60, Subpart III [40 CFR 60.610 – 60.618]	See b)(2)c.
i.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	<p>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.</p> <p>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.</p> <p>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.</p>
j.	<p>40 CFR, Part 63, Subpart F [40 CFR 63.100 – 63.107]</p> <p>[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.]</p>	<p>See b)(2)h., c)(2), c)(3), d)(6), d)(15) and e)(6)</p>
k.	<p>40 CFR, Part 63, Subpart G [40 CFR 63.110 – 63.153]</p> <p>[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.]</p>	<p>See b)(2)f., c)(9), d)(3), d)(5), d)(6), d)(8), d)(9), d)(16), e)(7) and f)(3)</p>

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

l.	<p>40 CFR, Part 63, Subpart H  [40 CFR 63.160 – 63.183]</p> <p>[In accordance with 40 CFR 63.160(a), this emissions unit is an affected source, since it includes 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.]</p>	<p>See b)(2)g., c)(4) through c)(8), d)(6), d)(12), d)(13), d)(17), e)(4), e)(8) and f)(4)</p>
m.	<p>OAC rule 3745-31-05(A)(3)  [PTI #03-9227, issued 11/20/03 (modification)]</p>	<p>6.0 lbs PE/hr, 26.3 tons PE/yr</p> <p>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</p> <p>6,614 lbs nitrogen oxides (NOx) per rolling, 24-hour period, 1,207.1 tons NOx/yr</p> <p>2.5 lbs sulfur dioxide (SO2)/hr, 11.0 tons SO2/yr</p> <p>130.8 lbs non-methane hydrocarbons (as carbon) (NMHC)/hr, 573.0 tons NMHC/yr</p> <p>See b)(2)d. through b)(2)g.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(DD); 3745-21-08(B); 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 63, Subpart H; 40 CFR, Part 60, Subpart A; 40 CFR, Part 60, Subpart Db; 40 CFR, Part 60, Subpart VV; and 40 CFR, Part 60, Subpart III.</p>
n.	<p>OAC rule 3745-18-06(E)</p>	<p>The emission limitation based on this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A).</p>

o.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(18) through d)(21), and e)(9)
----	---	--------------------------------------

(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 VV regulations overlap with those of 40 CFR, Part 63, Subpart H. 40 CFR 63.160(b) addresses this overlap and states 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. 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.
- d. 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.
- e. The AOGI is an incinerator used to control the closed vent system stream from the Acrylonitrile Plant #2 Reactor & 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.
- f. 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).
- g. The permittee shall include the appropriate process equipment and regulated components for emissions unit P035 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and record keeping,

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

reporting and testing) of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).

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.

The requirements of the applicable standards in OAC rule 3745-21-09(DD), are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to 40 CFR, Part 63, Subpart H.

- h. 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 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]

- (5) 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]

- (6) 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]

- (7) 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]

- (8) 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]

- (9) 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]

- (10) 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 OAC rule 3745-21-09(DD); 40 CFR, Part 60, Subparts A and Db; and 40 CFR, Part 63, Subparts A, F, G, and H.

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

- (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 OAC rule 3745-21-09(DD)(14)(d) and 40 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]

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

- (11) The permittee shall maintain records of all data obtained by the CO and NO<sub>x</sub> monitoring systems including , but not limited to, parts per million CO and NO<sub>x</sub> on an instantaneous (fifteen minutes) basis, emissions of CO and NO<sub>x</sub> 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 NO<sub>x</sub> 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 comply with all LDAR program monitoring requirements in accordance with 40 CFR 63.180. Emission monitoring shall be performed in accordance with Method 21 of 40 CFR, Part 60, Appendix A.

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

- (13) The permittee shall comply with all LDAR program record keeping requirements in accordance with 40 CFR 63.181. All records and information required shall be maintained in a manner that can be readily accessed at the plant site.

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

- (14) The permittee shall perform a daily 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)]

- (15) 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]

- (16) 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]

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

- (17) The permittee shall comply with the applicable 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]

- (18) 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 average combustion temperature within the AOGI, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

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) and 40 CFR, Part 64 ]

- (19) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicator for the AOGI controlling this emissions unit is the combustion temperature, which was established in accordance with the manufacturer's recommendations. When the combustion temperature shows operation outside the indicator range(s), 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 AOGI shall not be configured to have bypass capability, except for periods of process malfunction which require the gas stream to be diverted for safety purposes.

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

- (20) At all times, the permittee shall maintain the combustion temperature monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

- (21) 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 the following:
- all exceedances of the rolling, 365-day emission limitation for CO of 978 tons;
  - all exceedances of the rolling, 24-hour emission limitation for NO<sub>x</sub> of 6,614 pounds; and
  - 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) The permittee shall comply with the applicable LDAR program reporting requirements in accordance with 40 CFR 63.182.

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

- (5) 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 NO<sub>x</sub> 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 NO<sub>x</sub> 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 NO<sub>x</sub> 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]

- (6) 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]

- (7) 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]

- (8) The permittee shall comply with the applicable 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]

- (9) 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 3-hour blocks of time during which the average combustion temperature within the AOGI, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. an identification of each 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) and 40 CFR, Part 64]

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:

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

- 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 NO<sub>x</sub> 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 NO<sub>x</sub>/mmBtu of actual heat input, when fossil fuel alone is combusted
- Applicable Compliance Method: Compliance with the NO<sub>x</sub> standard of 0.10 lb/mmBtu of actual heat input shall be demonstrated through a 30-day rolling average of all the calculated hourly NO<sub>x</sub> 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 NO<sub>x</sub>/mmBtu of actual heat input, when chemical byproduct/waste and fossil fuel are simultaneously combusted
- Applicable Compliance Method: Compliance with the NO<sub>x</sub> standard of 1.5 lb/mmBtu of actual heat input shall be demonstrated through a 30-day rolling average of all the calculated hourly NO<sub>x</sub> 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 NO<sub>x</sub>/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 SO<sub>2</sub>/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

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

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 SO<sub>2</sub>/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

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 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: The permittee shall demonstrate compliance with the limitations above based upon the results of emission testing conducted in accordance the methods and procedures as outlined in section f)(2) for this emissions unit.

[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.

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

- b. The emission testing shall be conducted to demonstrate compliance with the mass emission rates for NO<sub>x</sub>, CO and NMHC.
- c. The following stack test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for NO<sub>x</sub> - Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A; for CO - Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A; and for NMHC - Methods 1 through 4, and 18, 25 or 25A, as appropriate, 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. The permittee shall perform emission testing on the AOGI to demonstrate compliance with the 98%, by weight, reduction of VOC (minus methane and ethane) or with the 20 ppmvd VOC, corrected to 3% oxygen. The permittee shall also establish the operating ranges for the AOGI firebox temperature and stack excess oxygen during the compliance test.

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

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]

- (4) The permittee shall comply with the applicable 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]

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/calclines 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 (SO <sub>2</sub> )/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.

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

- 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 SO<sub>2</sub> emissions are based on the following equation:

$$\text{AER} = 30 (P)^{0.67}$$

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.

$$\text{AER} = 30 (17.85)^{0.67} = 206.88 \text{ lbs SO}_2/\text{hr}$$

The actual SO<sub>2</sub> 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 SO<sub>2</sub> 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.

[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. 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:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the flow rate immediately after the corrective action was implemented; and
- f. 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 scrubber water flow rate monitoring each shift. If the 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 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 SO<sub>2</sub>/hr

Applicable Compliance Method:

Compliance with the hourly allowable SO<sub>2</sub> 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 (SO <sub>2</sub> )/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 SO<sub>2</sub> 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.

$$AER = 30 (1.5)^{0.67} = 39.36 \text{ lbs SO}_2/\text{hr}$$

The actual SO<sub>2</sub> 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 SO<sub>2</sub> 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 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) 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 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 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.

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

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 SO<sub>2</sub>/hr

Applicable Compliance Method: Compliance with the hourly allowable SO<sub>2</sub> 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.

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

	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 3745-21-07(G), 3745-17-07(A), 3745-17-11(B) and 3745-18-06(E).

(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 SO<sub>2</sub> 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 Reactor 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.	OAC rule 3745-21-09(DD)	See b)(2)j.
e.	40 CFR, Part 60, Subpart VV [40 CFR 60.480 – 60.489]	See b)(2)d.
f.	40 CFR, Part 60, Subpart NNN [40 CFR 60.660 – 60.668]	See b)(2)e.
g.	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)k., c)(2), c)(3), d)(1) and e)(1)
h.	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	See b)(2)f., b)(2)i., d)(2), d)(5), e)(2) and f)(2)

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	and in-process equipment is subject to 40 CFR 63.149 within a source subject to 40 CFR, Part 63, Subpart F.]	
i.	40 CFR, Part 63, Subpart H [40 CFR 63.160 – 63.183]  [In accordance with 40 CFR 63.160(a), this emissions unit is an affected source, since it includes 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)j., c)(4) through c)(8), d)(3) through d)(5), e)(3) through e)(5), and f)(3)
j.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 – 60.19
k.	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.  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.
l.	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)g. and b)(2)h.
m.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(6) through d)(9), and e)(7)

(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 VV regulations overlap with those of 40 CFR, Part 63, Subpart H. 40 CFR 63.160(b) addresses this overlap and states 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.
- e. 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.
- f. 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).
- g. 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 OAC rule 3745-21-09(DD)(10), 40 CFR, Part 63, Subpart A and G.
- h. The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subparts A, G, F, and H.
- i. 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.

- j. The permittee shall include the appropriate process equipment and regulated components for emissions unit P048 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting and testing) of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).

The requirements of applicable standards in OAC rule 3745-21-09(DD), are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to 40 CFR, Part 63, Subpart H.

- k. This emissions unit does not generate process wastewater as defined in 40 CFR 63.101. Aqueous streams 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.

- l. 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]

- (4) The permittee shall identify each piece of equipment subject to 40 CFR 63, Subpart H and monitor in accordance with the requirements of the subpart.

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

- (5) 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); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (6) 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]

- (7) 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); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (8) 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); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

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]

- (3) The permittee shall comply with the applicable 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]

- (4) The permittee shall comply with all LDAR program monitoring requirements in accordance with 40 CFR 63.180. Emission monitoring shall comply with Method 21 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (5) The permittee shall comply with all LDAR program record keeping requirements in accordance with 40 CFR 63.181. All records and information required shall be maintained in a manner that can be readily accessed at the plant site.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (6) The CAM plan for this emissions unit has been developed for volatile organic compound emissions. The CAM performance indicator for the flare controlling this emissions unit is monitoring either a pilot flame for continuous presence on the flare, or an electric arc ignition system for continuous arcing on the flare. If either a pilot flame or continuous arcing is not detected by one of these monitoring methods, 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 flare shall not be configured to have bypass capability.

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

- (7) Flare operating parameters shall be re-verified as a result of any changes to the operating conditions of the flare or emissions unit. In addition to monitoring for either a pilot flame or continuous arcing, the permittee also has an inspection and maintenance program for the flare, including but not limited to conducting a semi-annual visual inspection of the flare components for proper operation. Based on the results of these inspections, repairs to the flare shall be made as needed. If the current CAM indicators and/or the flare 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]

- (8) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the flare.

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

- (9) 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 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 comply with the applicable 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]

- (4) The permittee shall comply with the LDAR program reporting requirements in accordance with 40 CFR 63.182.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (5) The permittee shall submit semi-annual periodic reports in accordance with the provisions of 40 CFR, Part 63, Subparts G and H 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]

- (6) 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]

- (7) The permittee shall submit semiannual written reports that (a) identify all days during which either a pilot flame or continuous arcing was not detected for the flare serving this emissions unit and (b) describe any corrective actions taken to restore the flare to normal operating condition. 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]

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]

c. The permittee shall comply with the LDAR program testing requirements in accordance with 40 CFR 63.180.

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

(3) The permittee shall comply with the applicable 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]

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.	OAC rule 3745-21-09(DD)	See b)(2)c.
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)(2), e)(1), e)(2) and f)(3)
d.	40 CFR, Part 63, Subpart H [40 CFR 63.160 – 63.183]  [In accordance with 40 CFR 63.160(a), this emissions unit is an affected source, since it includes 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)c., c)(2) through c)(6), d)(3), d)(4), e)(3) and f)(4)

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

e.	40 CFR 63.1 – 63.15	<p>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.</p> <p>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.</p>
----	---------------------	--

(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. The permittee shall include the appropriate process equipment and regulated components for emissions unit P050 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting and testing) of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).

The requirements of the applicable standards in OAC rule 3745-21-09(DD), are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to 40 CFR, Part 63, Subpart H.

c) Operational Restrictions

- (1) The permittee shall establish 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]

- (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]

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 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 all LDAR program monitoring requirements in accordance with 40 CFR 63.180. Emission monitoring shall be performed in accordance with Method 21 of 40 CFR, Part 60, Appendix A.

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

- (4) The permittee shall comply with all LDAR program record keeping requirements in accordance with 40 CFR 63.181. All records and information required shall be maintained in a manner that can be readily accessed at the plant site.

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

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 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 LDAR program reporting requirements in accordance with 40 CFR 63.182.

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

f) **Testing Requirements**

- (1) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
- a. The emission testing shall be conducted within 2.5 years after issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the scrubber HAP removal efficiency. A vapor collection system inspection shall be conducted and recorded prior to the test. The permittee shall demonstrate scrubber water flow cessation and the interlock mechanism during the performance test.
  - c. The permittee shall comply with the applicable test provisions in 40 CFR 63.7, 63.128 and 63.129. 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 40 CFR, Part 63, Subparts A and G]

- (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]

- (3) The permittee shall comply with the applicable 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]

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.
b.	OAC rule 3745-21-09(DD)	See b)(2)b., c)(1), d)(1) 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. The permittee shall include the appropriate process equipment and regulated components for emissions unit P051 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). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

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)]

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)]

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)]

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.	OAC rule 3745-21-09(DD)	See b)(2)b., c)(1), d)(1) 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. The permittee shall include the appropriate process equipment and regulated components for emissions unit P052 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). [See OAC rule 3745-21-09(DD)(1) through 3745-21-09(DD)(17)].

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)]

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

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)]

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)]

f) Testing Requirements

- (1) None.

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)

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

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]

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

- (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:

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

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 and 202 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

(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.

[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. 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.

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

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:

- a. a description of the corrective action;
- b. the date the corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the flow rate immediately after the corrective action was implemented; and
- f. 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 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;

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

- 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.	OAC rule 3745-21-09(DD)	See b)(2)i.
d.	40 CFR, Part 60, Subpart A	See 40 CFR 60.1 through 60.19
e.	40 CFR, Part 60, Subpart VV [40 CFR 60.480 – 60.489]	See b)(2)d.
f.	40 CFR, Part 60, Subpart NNN [40 CFR 60.660 – 60.668]	See b)(2)e.
g.	40 CFR 63.1 – 63.15 [40 CFR 63.103]	<p>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.</p> <p>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.</p> <p>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.</p>

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

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 c)(3), c)(4), d)(1) and e)(1)
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)f., b)(2)h., d)(2), e)(2), e)(5) and f)(3)
j.	40 CFR, Part 63, Subpart H [40 CFR 63.160 – 63.183]  [In accordance with 40 CFR 63.160(a), this emissions unit is an affected source, since it includes 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)i., c)(5) through c)(9), d)(2), d)(3) through d)(5), e)(3) through e)(5), f)(2) and f)(4)
k.	OAC rule 3745-21-07(M)	See b)(2)c.
l.	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)g.
m.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(6) through d)(9), and e)(7)

(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)

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

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 VV regulations overlap with those of 40 CFR, Part 63, Subpart H. 40 CFR 63.160(b) addresses this overlap and states 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.
- e. 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.
- f. 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.
- g. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(DD), and 40 CFR, Part 63, Subparts A, F, G and H.
- h. 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).
- i. The permittee shall include the appropriate process equipment and regulated components for emissions unit P074 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).

The requirements of applicable standards in OAC rule 3745-21-09(DD), are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee, pursuant to 40 CFR, Part 63, subpart H.

- j. 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.
- k. 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]

- (5) The permittee shall identify each piece of equipment subject to 40 CFR 63, Subpart H and monitor in accordance with the requirements of the Subpart.

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

- (6) 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); 40 CFR, Part 63, Subpart H and PTI #03-13534]

- (7) 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); 40 CFR, Part 63, Subpart H and PTI #03-13534]

- (8) 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); 40 CFR, Part 63, Subpart H and PTI #03-13534]

- (9) 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); 40 CFR, Part 63, Subpart H and PTI #03-13534]

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]

- (3) The permittee shall comply with the applicable 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]

- (4) The permittee shall comply with all LDAR program monitoring requirements in accordance with 40 CFR 63.180. Emission monitoring shall comply with Method 21 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (5) The permittee shall comply with all LDAR program record keeping requirements in accordance with 40 CFR 63.181. All records and information required shall be maintained in a manner that can be readily accessed at the plant site.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #03-13534]

- (6) The CAM plan for this emissions unit has been developed for volatile organic compound emissions. The CAM performance indicator for the flare controlling this emissions unit is

monitoring either a pilot flame for continuous presence on the flare, or an electric arc ignition system for continuous arcing on the flare. If either a pilot flame or continuous arcing is not detected by one of these monitoring methods, 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 flare shall not be configured to have bypass capability.

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

- (7) Flare operating parameters shall be re-verified as a result of any changes to the operating conditions of the flare or emissions unit. In addition to monitoring for either a pilot flame or continuous arcing, the permittee also has an inspection and maintenance program for the flare, including but not limited to conducting a semi-annual visual inspection of the flare components for proper operation. Based on the results of these inspections, repairs to the flare shall be made as needed. If the current CAM indicators and/or the flare 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]

- (8) At all times, the permittee shall maintain an inventory of necessary parts for routine repairs of the flare.

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

- (9) 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 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 comply with the applicable reporting requirements listed in 40 CFR, Part 63, Subpart H [See 40 CFR 63.160 – 63.183].

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H and PTI #03-13534]

- (4) The permittee shall comply with the LDAR program reporting requirements, in accordance with 40 CFR 63.182. 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 H; and PTI #03-13534]

- (5) The permittee shall submit initial notifications in accordance with the provisions of 40 CFR, Part 63, Subparts G and H for this emissions unit.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subparts G and H; and PTI #03-13534]

- (6) 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]

- (7) The permittee shall submit semiannual written reports that (a) identify all days during which either a pilot flame or continuous arcing was not detected for the flare serving this emissions unit and (b) describe any corrective actions taken to restore the flare to normal operating condition. 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]

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 LDAR program testing requirements, in accordance with 40 CFR 63.180.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H and PTI #03-13534]

- (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]

- (4) The permittee shall comply with the applicable 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]

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 <sub>x</sub> )/day; 72.00 lbs of sulfur dioxide (SO <sub>2</sub> )/day and 13.23 tons per year (tpy) of SO <sub>2</sub> [See b)(2)h.]; 3,069.60 lbs of volatile organic compounds (VOC)/day [See b)(2)e.]; 105.60 lbs of particulate matter less than 10 microns in size (PM <sub>10</sub> )/day [See b)(2)i.].  The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(DD); 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 63, Subpart H; 40 CFR, Part 60, Subpart NNN; 40 CFR, Part 60, Subpart VV; and OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D) [PTI #P0103909, issued 11/15/11, modification]	332.44 tons of NO <sub>x</sub> per rolling 12-month period;  18.35 tons of CO per rolling 12-month period;

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		38.64 tons of VOC per rolling 12-month period [See b)(2)e.];  6.66 tons of PM10 per rolling 12-month period [see b)(2)j.]  See b)(2)g.
c.	OAC rule 3745-21-07(M)	See b)(2)j.
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.	OAC rule 3745-21-09(DD)	See b)(2)b.
h.	40 CFR, Part 60, Subpart VV	See b)(2)b.
i.	40 CFR, Part 60, Subpart NNN	See b)(2)c.
j.	40 CFR, Part 63, Subpart F	See b)(2)a.
k.	40 CFR, Part 63, Subpart G	See b)(2)a. and b)(2)d.
l.	40 CFR, Part 63, Subpart H	See b)(2)a. and b)(2)b.
m.	40 CFR, Part 64 – Compliance Assurance Monitoring (CAM)	See d)(4) through d)(7) and e)(9)

(2) Additional Terms and Conditions

- a. The permittee shall comply with all applicable standards in 40 CFR, Part 63, Subparts A, F, G, and H for this emissions unit.
- b. The permittee shall include the appropriate process equipment and regulated components for emissions unit P075 in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and recordkeeping, reporting, and testing) of 40 CFR, Part 63, Subpart H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks).

40 CFR, Part 60, Subpart VV regulations overlap with those of 40 CFR, Part 63, Subpart H. 40 CFR Part 63.260(b) addresses this overlap and states 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.

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

The requirements of the applicable standards in OAC rule 3745-21-09(DD) are equivalent to or less stringent than the alternative leak detection and repair (LDAR) monitoring plan submitted by the permittee pursuant to 40 CFR, Part 63, Subpart H.

- c. 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.
- d. 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).
- e. 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.
- f. 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).
- g. Emissions from the flare and/or thermal oxidizer controlling emissions unit P075 shall not exceed the following:
  - i. 332.44 tons of NO<sub>x</sub> 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<sub>10</sub> 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.

- h. SO<sub>2</sub> emissions are based on the maximum amount of SO<sub>2</sub> used in the process and are the same whether emitted from the flare or the thermal oxidizer.

- i. All emissions of particulate matter are PM<sub>10</sub>.
- j. 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) 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.

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

- 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;

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

- 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<sub>x</sub>, CO, VOC, and PM<sub>10</sub> emissions from the flare and thermal oxidizer calculated in accordance with the following:

$$E_i = F_i + TO_i$$

Where:

E<sub>i</sub> = Emissions for pollutant i

F<sub>i</sub> = Emissions of pollutant i from flare

TO<sub>i</sub> = Emissions of pollutant i from thermal oxidizer

for i = NO<sub>x</sub>

F = (flow rate HCN, in lbs) x (HCN heat content) x (NO<sub>x</sub> emission factor)

= [d](3)d.i. x 10,220 Btu/lb x 4.088 lbs of NO<sub>x</sub>/mmBtu]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (NO<sub>x</sub> 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<sub>x</sub>/mmBtu] + [d](3)d.v. x (3.26 lbs of NO<sub>x</sub>/hr]

for i = PM<sub>10</sub>

F = (flow rate HCN, in lbs) x (HCN heat content) x (PM<sub>10</sub> emission factor)

= [d](3)d.i. x 10,220 Btu/lb x 0.072 lbs of PM<sub>10</sub>/mmBtu]

TO = (flow rate HCN, in lbs) x (HCN heat content) x (PM<sub>10</sub> 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<sub>10</sub>/mmBtu] + [d](3)d.vii. x 7.6 lbs of PM<sub>10</sub>/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.]

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

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<sub>x</sub>, PM<sub>10</sub>, 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

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

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

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) and 40 CFR, Part 64]

- (5) The CAM plan for this emissions unit has been developed for volatile organic compounds. The CAM performance indicator for the thermal oxidizer controlling this emissions unit is the combustion temperature, which was established in accordance with the manufacturer's recommendations. When the combustion temperature shows operation outside the indicator range(s), 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 thermal oxidizer shall not be configured to have bypass capability, except for periods of process malfunction which require the gas stream to be diverted for safety purposes.

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

- (6) At all times, the permittee shall maintain the combustion temperature monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[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 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<sub>x</sub>, PM<sub>10</sub>, 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<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, 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 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
- b. an identification of each 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) and 40 CFR, Part 64]

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:

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

a. Emission Limitations:

- i. 544.80 lbs of CO/day.
- ii. 6,016.80 lbs of NO<sub>x</sub>/day.
- iii. 3,069.60 lbs of VOC/day.
- iv. 105.60 lbs of PM<sub>10</sub>/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<sub>x</sub> 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<sub>10</sub> 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<sub>2</sub>/day and 13.23 tons of SO<sub>2</sub>/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:

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

- 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<sub>10</sub>, SO<sub>2</sub> and NO<sub>x</sub>. 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<sub>10</sub>: Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M  
  
SO<sub>2</sub>: Methods 1 – 4 and 6 of 40 CFR, Part 60, Appendix A  
  
NO<sub>x</sub>: 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]

- (3) The permittee shall comply with the LDAR program testing requirements in accordance with 40 CFR 63.180.

[OAC rule 3745-77-07(C)(1); 40 CFR, Part 63, Subpart H; and PTI #P0103909]

g) Miscellaneous Requirements

(1) None

**15. P077, Ammonia Recovery System**

**Operations, Property and/or Equipment Description:**

The ammonia recovery system will remove ammonia from an aqueous co-product stream (supplied by a neighboring chemical plant) in order to utilize the recovered ammonia as part of the feed to the existing Acrylonitrile plant. This system is integrated with the steam generation and distribution system, will utilize the cooling water system, existing wastewater treatment systems, and raw material supply systems. Primary process equipment for the ammonia recovery system consists of the ammonia recovery column (C-102), feed drum (V-108) and ancillary equipment, with a non-assisted 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) g)(2).

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.	OAC rule 3745-31-05(A)(3) (PTI #03-13232, issued 8/4/99)	Flare emissions:  0.12 lb of ammonia (NH <sub>3</sub> )/hr, 0.52 ton NH <sub>3</sub> /yr  0.001 lb organic compounds (OC)/hr, 0.006 ton OC/yr  See b)(2)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. Process vent streams from the ammonia recovery system shall be combusted with a flare.

c) Operational Restrictions

- (1) A pilot flame shall be maintained at all times in the flare's pilot light burner.

[OAC rule 3745-77-07(A)(1) and PTI #03-13232]

- (2) 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.

[OAC rule 3745-77-07(A)(1) and PTI #03-13232]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information:

- a. All periods during which there was no pilot flame.
- b. The operating times for the flare, monitoring equipment, and the associated emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13232]

- (2) The permittee shall inspect all fittings (valves, flanges, etc.) associated with the ammonia recovery system on a monthly basis. Any component found to be leaking or in need of repair shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected. For the purposes of this monitoring program, a leak is detected by visual, audible or olfactory methods.

[OAC rule 3745-77-07(C)(1) and PTI #03-13232]

- (3) The permittee shall maintain records of all repairs made to process equipment components.

[OAC rule 3745-77-07(C)(1) and PTI #03-13232]

- (4) 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 emission 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 Method 22 of 40 CFR, Part 60, Appendix A, and record the results in an operations log.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly.

[OAC rule 3745-77-07(C)(1) and PTI #03-13232]

- (2) The permittee shall submit quarterly reports which include all visible emission readings conducted pursuant to the methods and procedures specified in Method 22 of 40 CFR, Part 60, Appendix A, 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 and shall address the data obtained during the previous calendar quarter.

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

- (3) The permittee shall submit 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 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)]

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. Emissions Limitation: 0.12 lb NH<sub>3</sub>/hr

Applicable Compliance Method: The emission limitation was developed by applying a 98% flare destruction efficiency to a maximum uncontrolled emission rate of 5.9 lbs/hr NH<sub>3</sub>. Compliance shall be demonstrated through the monitoring and record keeping requirements in section d). If required, the

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

permittee shall demonstrate compliance by testing in accordance with the methods specified in paragraphs (P)(2) and (P)(3) of OAC Rule 3745-21-10.

- b. Emissions Limitation: 0.52 ton NH<sub>3</sub>/yr

Applicable Compliance Method: The ton/yr limitation was developed 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 hourly limitation, compliance with the annual limitation shall also be demonstrated.

- c. Emissions Limitation: 0.001 lb OC/hr

Applicable Compliance Method: The hourly emission limitation was developed by applying a 98% flare destruction efficiency to a maximum uncontrolled emission rate of 0.065 lb/hr OC. Compliance shall be demonstrated through the monitoring and record keeping requirements in section d). If required, the permittee shall demonstrate compliance by testing in accordance with the methods specified in paragraphs (P)(2) and (P)(3) of OAC Rule 3745-21-10.

- d. Emissions Limitation: 0.006 ton OC/yr

Applicable Compliance Method: The ton/yr limitation was developed 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 hourly limitation, compliance with the annual limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13232]

- g) Miscellaneous Requirements

- (1) All start-up and shutdown activities for emissions unit P077 shall be reported in accordance with the provisions of OAC rule 3745-15-06.
- (2) Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01.

The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

**16. P078, Barex Dust Collection System**

**Operations, Property and/or Equipment Description:**

Dust collection system for the Barex plastic resin extrusion and packaging process, with two baghouses. 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 baghouse 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 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 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.

**17. P080, Cooling Tower #1**

**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.

**18. P081, Cooling Tower #2**

**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 <sub>10</sub> ) 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)(, 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]  [In accordance with 40 CFR	See b)(2)f., c)(2), c)(3), d)(2) and e)(3)

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	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<sub>10</sub>:
  - 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<sub>10</sub> 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<sub>10</sub>.
- 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<sub>10</sub> 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 TSD 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<sub>10</sub> 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.